### MODELS OF COMMUNITY CARE FOR THE ELDERLY INVOLVING COLLABORATION BETWEEN SPECIALIZED GERIATRIC SERVICES AND PRIMARY CARE PRACTITIONERS

For: The Regional Geriatric Program of Eastern Ontario; c/o Fara Amnizadeh

From: Knowledge To Action, Ottawa Hospital Research Institute; Managing coordinator: Kristin Konnyu

**Submitted:** September 14<sup>th</sup>, 2011.

### TABLE OF CONTENTS

- 1. Summary table of relevant services/models
- 2. References of studies/reports summarized
- 3. References of potentially relevant reviews
- 4. References of potentially relevant reports which were unavailable electronically
- 5. References of excluded articles

APPENDIX A: Grey literature searches

### NOTES ON METHODOLOGY

- Assessed herein are the full-text reports retrieved from electronic database searches only (n=217).
   Screening and interpreting this literature required an extensive time commitment and conceptual clarification (as compared to other scoping questions), and thus limited the amount of articles that could be processed each day (average rate of ~30/day). Due to these circumstances, records retrieved through grey literature searching were not able to be screened or summarized; these searches have been attached here as an Appendix (APPEDNDIX A).
- Due to the various constraints (lack of familiarity with literature/concepts, time restraints, magnitude of evidence) and the nature of this project (scoping review for internal use only), phrasing of summarized articles had undergone minimal modification; where changes have been made, it was in the interest of trying to be as concise as possible. Accordingly, if any information were to be extracted into subsequent reports/publications, revisions of phrasing would need to occur.
- All summarized articles, reviews, and excluded articles (excluded at level of full-text) are available upon request in Pdf format. Reasons for exclusion at Level 2 are also available upon request.
- Due to the exploratory nature of this project, a broad definition of 'review' was employed in capturing articles that synthesized potentially relevant information on models of interest (e.g. review, systematic review, discussion papers, etc.)

### COMMENTS/REFLECTIONS ON LITERATURE

- As expected, there is a paucity of literature document models of collaboration between specialized geriatric services (SGS) and primary care physicians (PCPs). Where models/programs do exist, the focus of the model tends to be on the SGS itself, and collaboration with PCP is an adjunct, and accordingly, its processes, barriers/facilitators, etc. are under-evaluated and reported. Some models however did appear to meet this collaborative goal, and hopefully will be considered useful.
- An exception to this are a few excellent models, two of which (PRISMA, SIPA) involved extensive PCP collaboration and were Canadian-based.

### 1. Summary table of relevant services/models

Author (Year)	Location	Population	Structure (i.e., key components of the service/model)	Processes (i.e., targeting/entry/referral processes;	Outcomes (i.e., quality of life; satisfaction w/ care;	Cost-effectiveness
				barriers/facilitators to collaboration)	functional status; community tenure; survival)	
GENERAL POPULATION						
GENERAL POPULATION Beland et a.(2006) <sup>RefiD270</sup> [Other reference de Stampa et al.(2009) <sup>RefiD130</sup> ]	Beland et a.(2006) <sup>RefiD270</sup> Canada (Montreal, Quebec) [Other reference de Stampa et	64+, community- dwelling elders residing in catchment area.	<ul> <li>Program name: SIPA (French acronym for System of Integrated Care for Older Persons)</li> <li>Key components: Community-based interdisciplinary teams with full clinical responsibility for delivering integrated care through the provision of community health and social services and the coordination of hospital and nursing home care; all within a publically managed and funded system.</li> <li>On admission, patients receive a comprehensive geriatric assessment. A series of interdisciplinary evidence-based protocols were developed and applied in collaboration with the patient's PCP.</li> </ul>	<ul> <li>Entry: Participants were recruited from community organization.</li> <li>Exit: Following 22-months</li> <li>Barriers/facilitators: Poor incentives for PCP engagement in the care of the frail elderly limited their involvement and the SIPA teams' ability to mobilize timely community medical intervention.</li> <li>[from RefID130 – article focused barriers/facilitators of PCP participation with SIPA]: Key themes associated with PCP participation were clinician characteristics, consequences perceived at the outset, the SIPA implementation process, relationships</li> </ul>	Evaluation design: RCT (n=1,270); SIPA vs. control. Controls were offered some community services (e.g. home care) but no case management. Quality of life: NR Functional status: NR Community tenure: Highly significant 50% reduction in the number of acute hospital patients in the SIPA group that became ALC. No significant differences in admissions, utilization, or costs for other components of institutional care: emergency department, acute hospital, and nursing home.	Total community costs were 44% higher for SIPA compared to control group users, whereas institutional costs were 22% lower. Mean costs were overall balanced and thus SIPA was cost neutral.
			<ul> <li>With the aim of rapidly meeting needs and avoiding inappropriate hospital and nursing home utilization, the teams readily mobilized resources, incl. intensive home care, group homes, and a 24hr on-call service.</li> <li>Case managers intervened on medical and social issues with patients and caregivers, liaised with family physicians, and actively followed patients throughout the care trajectory, assuring continuity and easing transitions between hospital and community.</li> <li>PCP collaboration: Patients were encouraged to continue to see their own physician. PCPs collaborate in delivering evidence-based management protocols. In addition to their usual fee-for-service payments, the program offered</li> </ul>	with the SIPA team and professional consequences. The incentive factors reported were collaborative practices, high rates of elderly and SIPA patients in their clienteles, concerns about SIPA, the selection of frail elderly patients, close relationships with the case manager, the perceived efficacy of SIPA, and improved professional practices. Barriers to PCP participation included high expectations, PCP recruitment, lack of information on SIPA, difficult relationships with SIPA geriatricians and deterioration of physician- patient relationships.	Survival: NR Other: A trend for increased satisfaction among SIPA participants was observed at 1yr; caregivers' satisfaction after 1yr was significantly higher for SIPA than for control.	

	•	-	•	•		-
			PCPs \$400 per SIPA patient annually to compensate for PCP time communicating with the team; SIPA staff physicians served only as a back- up and a resource to the team and PCPs.			
Blewett et al. (2010) <sup>RefiD</sup>	US (Minneapolis, Minnesota)	Elderly requiring transitional or post- acute care in a nursing home facility.	<ul> <li>Program name: University of Minnesota's Interprofessional Teaching and Practice Team (U-Team).</li> <li><u>Key components:</u> Interprofessional team: 1 geriatrician, 1 geriatric nurse practitioner, 1 geriatric pharmacist. Practice within a 44-bed (max. 25 patients) transitional care unit (TCU) in a nursing facility, where patients are admitted to receive short-term rehabilitative care, usually following a hospital stay.</li> <li>Day-to-day care varies, but is team-directed through informal and formal team communication and plans of patient care.</li> <li><u>PCP collaboration:</u> The U-team does not co- manage patients with PCP, but rather replaces the role of the PCP during U-team care. Upon discharge from the unit, the U-team provides detailed discharge summaries to PCPs (including rehab history and all tests and lab work) to facilitate post-discharge follow-up between the patient and the PCP. Discharge, and full summaries are dictated, transcribed and mailed as soon as possible so that the PCP will have the necessary information prior to the patient's scheduled follow-up appointment.</li> </ul>	Entry: Post-acute care (typically following hospital care). <u>Exit</u> : Transfer to a residential care setting (e.g. home, assisted living, or long-term care). <u>Barriers/facilitators</u> : No information with respect to collaboration with PCP specifically.	Evaluation design: Observational program evaluation using administrative records (n=347), comparing usual care to interprofessional team care (U-Team) in a TCU. <u>Quality of life</u> : NR <u>Functional status</u> : NR <u>Community tenure:</u> NR <u>Survival</u> : NR <u>Other:</u> U-Team patients had shorter lengths of stay as compared with usual care (20.4 days vs. 27.0).	Average total cost for care was lower for U- Team patients as compared with usual care.
Bowles (2008) <sup>RefiD564</sup>	Canada (Halifax, Nova Scotia)	Elderly (specifics not reported).	Program name: Centre for Health Care of the Elderly, incl. a Memory Disability Clinic and a Community Outreach Program.	Entry: Referral by PCP; triaged according to complexity and urgency. Exit: NR	Evaluation design: Case report of model, no explicit evaluation. Quality of life: NR	NR
			Key components: Comprehensive interdisciplinary assessment, treatment, and education of frail elder persons and their caregivers. The Memory	Barriers/facilitators: NR	Functional status: NR	
			Disability Clinic specializes in assessing and		Community tenure: NR	
						B

Page 3 of 51

	·		managing cognitive impairment; the Community		·	
			Outreach Program provides comprehensive geriatric assessment in the patient's home or a		Survival: NR	
			long-term care facility. Team incl. 1 pharmacist,			
			geriatricians, nurse practitioners, registered			
			nurses, and social workers.			
			Following assessment, the case is reviewed with the attending geriatrician wrt the need for referral to other disciplines (e.g., physiotherapy or social			
			work) or geriatric services (e.g., home care,			
			seniors mental health, or geriatric day hospital),			
			the need for further testing (e.g., a neurological			
			assessment) and a treatment and monitoring plan.			
			The pharmacist and geriatrician then meet with the patient and family to review the diagnosis			
			(post 1 <sup>st</sup> assessment) or progress (post follow-up			
			assessments), the need for other services or			
			testing, and the treatment plan.			
			PCP collaboration: Pts are referred by PCPs. PCP receive a detailed consultation letter from the			
			service which is reviewed and signed off on by the geriatrician.			
Fairhall et al.(2008) <sup>RefiD155</sup>	Australia	70+, >3 Fried Frail Criteria,	Program name: Frailty Intervention Trial (FIT)	Entry: Physician referral.	Evaluation design: RCT (n=230 planned) comparing FIT intervention to usual care (NB:	To be evaluated.
al.(2008)		community-based.	Key components: Multidisciplinary intervention	Exit: Following 1 year intervention.	study protocol; no results reported)	
		community suscu.	targeting frailty. The intervention is tailored to	Barriers/facilitators: NR		
			each participant based on their frailty		Quality of life: To be evaluated.	
			characteristics assessed at baseline. Clients nutrition, depression, weakness, general health		Functional status: To be evaluated.	
			status will be assessed, and appropriate referrals,		<u>ranctional status</u> . To be evaluated.	
			linkages, or technologies will be provided.		Community tenure: To be evaluated.	
			PCP collaboration: Medications will be reviewed		<u>Survival</u> : NR	
			and any apparent sub-optimal medication use will be discussed with the patients PCP.			
Fisher et al.(2005) <sup>RefiD282</sup>	US (5 counties of	Chronically ill	Program name: VNS CHOICE.	Entry: NR	Evaluation design: n/a (program description –	NR
	New York City)	elderly population		Exit: Most clients continue to use the service	loose reporting of improvements over time, but	
[Other reference: Fisher			Key components: Comprehensive care	'for life'.	no specific evaluation).	
and			coordination and integration of clinical services			

### Raphael(2003)<sup>RefID650</sup>

across a network of >120 community-based organizations. Interdisciplinary team. Team incl. nurse consultant care managers, social workers, rehabilitation consultants, nurse practitioners, and nutritionists. Coordination between clinical professionals within the interprofessional team occurs regularly (e.g., team meetings, case conferences). Goal of program is to provide comprehensive service delivery addressing the social, environmental, physical and medical needs of individuals while integrating acute and longterm care; collaboration between interdisiciplinary team, clients, caregivers, physicians; and continuous coordination of care.

Upon initial assessment, the nurse consultant care manager identifies and coordinates the need for interventions by members of the care management team (disciplines noted above); additional social services (e.g. 'meals on wheels') are coordinated as needed. Care is informed and directed by clinical care guidelines.

PCP collaboration: PCPs are integrally involved in the development of a member's plan of care and are notified regarding changes in clinical status and care. Decisions regarding nursing home admissions are made jointly between the client, their family, and the PCP.

[from RefID 650]: PCP collaboration includes 3 general activities, aimed at achieving a shared understanding of a member's medical needs and appropriate interventions: 1) initial and ongoing follow-up and communication. Nurse consultants involve PCPs in care planning – from initial enrollment to revised plans of care every 60 days – and notify them of significant changes in patient status; 2: Care plan review. PCPs review and provide medical orders for all home care services; 3: When necessary, nurse consultants arrange in

#### Barriers/facilitators: NR

#### Quality of life: NR

#### Functional status: NR

Community tenure: [from RefID 650] In the 4<sup>th</sup> year of program operation, 11.6% of its members had nursing home admissions (incl. both post-acute short-term and permanent long-term admissions).

#### Survival: NR

Other: Satisfaction surveys demonstrate client's satisfaction with the flexibility of the service delivery system.

Page 5 of 51

			advance to join their members for PCP office			
			visits.			
Ganz et al. (2008) <sup>RefiD150</sup>	US	'Vulnerable elders':65+ yrs at increased risk for death or functional decline based on their age, self- reported health and/or functional limitations	Program name: Co-management model; a primary care approach for direct care of vulnerable elders <u>Key components:</u> Referral of PCP to clinician (or clinician teams) with expertise in caring for the elderly. These additional resources could include: geriatricians, nurse specialists, case managers, social workers, rehabilitation therapists, mental health counselors, home health agencies, and a network of referrals to high-quality community organizations (NB: although the model notes this collaboration may be with a team, a SGS with an integrated system of these expertise listed is not an inherent condition of this model). <u>PCP collaboration:</u> PCP shares responsibility of patient with another clinician (or care team) with additional expertise in caring for vulnerable elders.	Entry: PCP refers patients to the vulnerable elder expert or team for a one-time consultation or ongoing management. <u>Exit</u> : NR <u>Barriers/facilitators:</u> Authors argue that for the co-management model to be effective, clinicians caring for vulnerable elders need to create efficient access to additional clinical experts and supporting staff as well as community linkages.	Evaluation design: n/a (only description of model; no evaluation)	n/a (only description of model; no evaluation).
Herbert et al.(2010) <sup>RefiD90</sup> [Other reference: Milette et al.(2005) <sup>RefiD283</sup>	Canada (Quebec)	65+, to present significant disabilities, need for >3 different services.	Program name: Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA). Key components: Coordination-based integrated care. As opposed to fully-integrated systems, this model uses all the public, private, or voluntary health and social service organizations involved in caring for older people in a given area. Accepted participants are assigned a case manager who is responsible for conducting a thorough assessment of the patient's needs, planning the required services, arranging patient admission to the services, organizing and coordinating support, directing the multidisciplinary team involved in the case, advocating, monitoring, and reassessing the patient as frequently as necessary (min. 2x/year) (NB: case manger can be a nurse, social worker, or another health professional and should be specifically trained). Each patient receives an individualized service plan (ISP) which is	Entry: Potential participants (or care providers) may call an info line and be screen 24/7; if screened positive, further assessment is undertaken and suitable participants are referred to a case manager. Exit: Length of intervention was unclear; participants were evaluated over 4yrs. Barriers/facilitators: [from RefID283]: Although PCPs were interested in participating in integrated service delivery networks and working with case managers, the study found that they must be better informed about the availability of case managers, how they can reach case managers, case mangers' precise role, and the advantages to themselves and their patients for using these services.	Evaluation design: Population-based, quasi- experimental study with 3 experimental and 3 comparison areas (n=1,501) Quality of life: NR Functional status: Over the last 2 years of the study, there were 63 fewer cases of functional decline per 1,000 individuals in the experimental group; in the 4 <sup>th</sup> year of the study, the annual incidence of functional decline was lower by 137 cases per 1,000 in the experimental group. Community tenure: No difference. Survival: No difference. Other: The prevalence of unmet needs in the comparison region was nearly double the prevalence observed in the experimental region. Satisfaction and empowerment were significantly	NR

			established by a multidisciplinary team and reflects the patients assessment, prescribed services, and target objectives. PCP collaboration: The case manager works closely with the PCP. PCPs attend the interdisciplinary team meetings in which patients ISPs are formulated (those unable to attend the meeting, usually discuss the case with the case manager before and after the meeting).	·	higher in the experimental group. For health services utilization, a lower number of visits to emergency rooms and hospitalizations than expected was observed in the experimental cohort.	
Hirth et al.(2009) <sup>RefiD551</sup> [Other references: Li et al.(2009) <sup>RefiD103</sup> ; Nadash(2004) <sup>RefiD331</sup> ; Kane et al.(2002) <sup>RefiD410</sup> ; Wieland et al.(2000) <sup>RefiD460</sup> ; Mukamel et al.(2006) <sup>RefiD273</sup> ; Fitzgerald(2004) <sup>RefiD356</sup>	US	Frail, chronically ill older adults (55+).	Program name: Program of All-Inclusive Care (PACE) <u>Key components:</u> Comprehensive community- based care model; incl. team care, managed health care services, and care coordination. Interdisciplinary team incl. physicians, nurse practitioners, social workers, nutritionists, and therapists, as well as health and transportation workers. This team collaborates for coordinated medical and social services across the acute and long-term settings, including priority access to primary care. Model offers care plans, facilitates community- living for as long as possible, and provides a one- stop shop for all necessary health services (incl. medications). <u>PCP collaboration:</u> PCP are member of the interdisciplinary team. NB: extent of collaboration with patients' existing PCP unclear. [From RefID103]: For participants in an acute care setting, the PCP are in daily contact with the hospital physicians and serve as the conduit to the interdisciplinary team. Additionally, ferrals to	Entry: Unclear Exit: Unclear Barriers/facilitators: NR	Evaluation design: Various. Quality of life: Better quality of life. Functional status: Better functional status. Community tenure: Fewer nursing home admissions. Survival: Longer survival rates. Other: Greater satisfaction with overall care arrangements.	[from RefID103:] The program, which serves as both a medical provider and a health plan is reported to be cost- effective.
Wright et al.(2007) <sup>RefiD220</sup>	US	Low-income elderly patients with chronic conditions and functional impairment at high	medical specialists are coordinated through PCPs. Program name: After Discharged Care Management of the Frail Elderly (AD-LIFE) Pilot Key components: Integrated care management by an interdisciplinary team. Following assessment by	Entry: At-risk older elders were identified while hospitalized with an acute-illness. Exit: NR <u>Barriers/facilitators</u> : A unique feature of this	Evaluation design: Before-and-after pilot study (n=118). Quality of life: NR	Pilot noted decreased total costs after implementation of the care management program.

Page 7 of 51

		risk for rehospitalization or nursing home placement.	<ul> <li>an advanced practice nurse, assessment findings were shared with an interdisciplinary team (team incl. the patient, a geriatrician, a registered nurse care manger, a pharmacist, a social worker, and other specialists as needed) to develop a care plan supported by evidence-based protocols.</li> <li>The registered nurse care manager could call or visit patients as needed to ensure that the recommendations were implemented; they could even accompany them to any PCP visits, if necessary.</li> <li>PCP collaboration: After discharge the registered nurse care manager implemented the care plan in collaboration with the PCP. The PCPs were educated regarding the care management process, and each PCP practice was assigned its own RN care manger.</li> <li>NB: Full RCT evaluating the AD-LIFE program is ongoing (AD-LIFE vs. usual care).</li> </ul>	program permitted reimbursement for PCPs to meet face-to-face in their offices with care mangers for ~15mins to review care plans and receive updates. This feature helped in achieving collaboration between the care manager, the interdisciplinary team, and the PCP.	Functional status: At 1yr, patients indicated that they had not experienced a subjective decline in health during the year. Community tenure: Pilot noted decreased hospitalizations following implementation of the care management program. Survival: NR Other: After 1yr in the care management program, 70% of satisfaction survey responders, indicated that care management had improved their health, had made it easier to get healthcare services, and had provided them with a better understanding of their disease. >90% said they would recommend the program to their friends, and rated their experience as good or excellent. Surveys of PCPs showed extremely high levels of satisfaction as well.	
Yaggy et al.(2006) <sup>RefiD272</sup>	US (Durham, North Carolina)	Poor seniors and disabled adults living independently in clustered housing.	<ul> <li>Origong (AD-LIFE Vs. usual care).</li> <li>Program name: Just for Us.</li> <li><u>Key components:</u> In-home care provided by an interagency interdisciplinary team. Care team includes: primary care providers (e.g. physicians, nurse practitioners, physician assistants), social workers, 1 geriatric psychiatrist, 1 doctor of pharmacy, 1 nutritionist, 1 occupational therapist, 1 phlebotomist.</li> <li>Weekly meetings between medical director and team members to discuss patient care, incl. medication changes, social issues, support services, chronic disease management, and posthospital care.</li> <li>Majority of in-home primary care is delivered by the nurse practitioner or physician assistant. On the first visit, the clinician completes a comprehensive physical assessment with</li> </ul>	Entry: Patients are enrolled by local social workers. Patients are also enrolled through self-referral and referrals from local agencies and physicians. <u>Exit</u> : NR <u>Barriers/facilitators</u> : NR	Evaluation design: Assessment of Medicaid expenditures. <u>Quality of life</u> : NR <u>Functional status</u> : NR (evaluation ongoing) <u>Community tenure:</u> NR <u>Survival</u> : NR	Although the progra was designed to be a sustainable, low-cos service, it has not broken even to date (but is 'making progress'). In line with the programs intensive efforts to manage chronic disease – costs are increased for pharmacy, outpatient visits, home health, etc. bu lower for decreased for emergency department use, and inpatient care. Page 8 of 51

		particular attention to the management of chronic illnesses. Several follow-up visits are arranged, also with a focus on chronic-disease management. Social workers also provide case management, arranging non-medical visits and advocating for patients.			
		<u>PCP collaboration:</u> If the patient has a PCP, the program contacts the provider to determine their preference for being kept informed of the patients' medical condition and medication changes.			
Australia (Adelaide)	Elderly patients with medication problems and difficult behaviors (pain- and dementia- related) in high-level residential aged care facilities.	<ul> <li>Program name: NR</li> <li>Key components: Multidisciplinary case conferences. Team incl. the resident's PCP, a geriatrician, a pharmacist, residential care staff, and a representative of the Alzheimer's Association of South Australia.</li> <li>PCP collaboration: PCPs were advised that facility staff had nominated their patient for the study and were invited to attend two multidisciplinary case conferences conducted 6-12 weeks apart (times negotiated around the PCPs schedule). Ease case conference was chaired by the PCP, who used their medical records in addition to the case notes</li> </ul>	Entry: Referred by facility staff Exit: Following intervention and 3-month follow-up. Barriers/facilitators: While reimbursement for PCPs has been a facilitator for PCP involvement in case conferences, the study notes that there have been many barriers to the uptake of regular case conferences outside of a research environment. Focus groups with PCPs undertaken at the end of the project indicated that the major obstacle to using case conferences is the time required to organize such a meeting, and the challenge of coordinating a group of	Evaluation design: Cluster-RCT (n=10 facilities; n=154 residents) Quality of life: NR Functional status: NR Community tenure: NR Survival: 45/154 residents died before follow-up (no difference between groups). Other; At 3 months, medication appropriateness improved in the intervention group as compared to the control group. Resident behaviors were	NR
Finland (Helsinki and Uusimaa)	Elderly couples with dementia.	from the facility. A problem list was developed by the PCP in conjunction with the care staff and a medication review was conducted prior to each case conference. Program name: NR <u>Key components:</u> Multicomponent intervention program designed with the aim to prolong community care of people with dementia; team incl. 1 family care coordinator (public health nurse), 1 geriatrician, support groups for caregivers, and individualized services.	multidisciplinary health professionals. Entry: Recruitment via newspapers or Alzheimer's Disease drug register. <u>Exit</u> : End of study. <u>Barriers/facilitators</u> : NR	unchanged after the intervention, and the improved medication appropriateness did not extend to other residents in the facility. <u>Evaluation design</u> : RCT, intervention as compared with usual care. <u>Quality of life</u> : NR <u>Functional status</u> : NR Community tenure: At 1.6 years, a larger	The intervention led to a reduction in the use of community services and expenditures. The difference for the benefit of the intervention group
	(Adelaide) Finland (Helsinki	<ul> <li>(Adelaide) with medication problems and difficult behaviors (pain- and dementia- related) in high-level residential aged care facilities.</li> <li>Finland (Helsinki Elderly couples with</li> </ul>	Illnesses. Several follow-up visits are arranged, also with a focus on chronic-disease management. Social workers also provide case management, arranging non-medical visits and advocating for patients.PCP collaboration: program contacts the provider to determine their preference for being kept informed of the patients' medical condition and medication changes.Australia (Adelaide)Elderly patients with medication problems and difficult behaviors (pain- and dementia- related) in high-level residential aged care facilities.Program name: NRPCP collaboration: PCP collaboration: PCPs were advised that facility staff had nominated their patient for the study and were invited to attend two multidisciplinary case conferences conducted 6-12 weeks apart (times negotiated around the PCPs wheek apart (times negotiated around the pCP) who used their medical records in addition to the case notes from the facility. A problem list was developed by the PCP in conjunction with the care staff and a medication review was conducted prior to each case conference.Finland (Helsinki and Uusimaa)Elderly couples with dementia.Key components: Multicomponent intervention program designed with the aim to prolong community care of people with dementia; team <td>Intersest. Several follow-up visits are arranged, also with a focus on chronic-disease management, arranging non-medical visits and advocating for patients.&lt;</br></td> <td>Australia       Elderly patients       PCP collaboration: If the patient has a PCP, the program contacts the provide to determine that: program contacts the provide contact is provide contact in high-level program name: NR       Elderly patients       Evaluation design: Cluster-RCT (n=10 facilities: program contacts the provide contact of proprise provide contact research contact provide contact research contact provide contact of proprise provide contact research contact provide contact research ender the program contact provide contact research ender the program contact research ender program contacts research ender program contacts research ender program contacts research ender program contact research ender program contacts research ender program contact research ender program contact research ender program contact research ender program contacts research ender program contacts research ender program contacts research ender program contacts research ender program contact research ender prograd contact research ender program contact rese</td>	Intersest. Several follow-up visits are arranged, also with a focus on chronic-disease management, 	Australia       Elderly patients       PCP collaboration: If the patient has a PCP, the program contacts the provide to determine that: program contacts the provide contact is provide contact in high-level program name: NR       Elderly patients       Evaluation design: Cluster-RCT (n=10 facilities: program contacts the provide contact of proprise provide contact research contact provide contact research contact provide contact of proprise provide contact research contact provide contact research ender the program contact provide contact research ender the program contact research ender program contacts research ender program contacts research ender program contacts research ender program contact research ender program contacts research ender program contact research ender program contact research ender program contact research ender program contacts research ender program contacts research ender program contacts research ender program contacts research ender program contact research ender prograd contact research ender program contact rese

		-	The core elements of the intervention consisted of a family care coordinators actions, a geriatrician's medical investigations and treatments, goal- oriented support group meetings for spouse caregivers, and individualized services. <u>PCP collaboration:</u> The couples continued to see their own PCP, although the family care coordinator and geriatrician cooperated closely	·	intervention group was in long-term institutional care (25.8% vs. 11.1%, p=0.3). At 2 years the difference was no longer statistically significant. <u>Survival</u> : NR	When the intervention costs were included, the differences were not significant.
Templeton (2005) <sup>RefiD313</sup>	US (Asheville, North Carolina)	Elderly with cognitive impairment.	with them.Program name: Memory Assessment Clinic (MAC)Key components: Aims to provide medical assessment, treatment, support and care management, and education to patients, caregivers and clinicians about dementia. Multidisciplinary team incl. physician and care manager (trained in nursing or social work).MAC physicians serve as a consultative role and focus on dementia alone.PCP collaboration: The program aims to identify patients without PCPs and provides a list of local PCPs accepting new patients; PCP expertise are used to ensure referral to the program is appropriate (i.e. through evaluation, labs, etc.). Collaboration with PCPs is considered essential in order to facilitate routine monitoring and treatment of health problems that may impact cognitive function.	Entry: Physician referral. Exit: MAC patients are often involved for the duration of the disease process, depending on family needs. Barriers/facilitators: NR	Evaluation design: Case report of model, no explicit evaluation. Quality of life: NR Functional status: NR Community tenure: NR Survival: NR	Model is costly, and could not exist without extensive community support.
Wolfs et al.(2008) <sup>RefiD181</sup>	The Netherlands (Maastricht)	55+, suspected diagnosis of dementia or a cognitive disorder.	Program name: Diagnostic Observation Centre for Psychogeriatric Patients (DOC-PG) <u>Key components:</u> Out-patient diagnostic facility; aim to provide PCP with detailed diagnostic and therapeutic advice for patients with cognitive disorders. Expertise in the old age psychiatry, geriatric medicine, neuropsychology, physiotherapy, occupational therapy, geriatric nursing, and mental health nursing.	Entry: PCP in catchment area were asked to refer all patients with possible dementia or a cognitive disorder. Exit: NR Barriers/facilitators: NR	Evaluation design: Cluster RCT (randomized at PCP practice level; n=70 practices; n=230 patients) comparing, integrated multidisciplinary diagnostic facility to 'treatment as usual' for psychogeriatric patients assessed by interviews with the patients proxy. <u>Quality of life</u> : HRQoL improved slightly with the DOC-PG group and decreased with the usual care group. After 12 months, more patients in the	NR (analysis ongoing)

		Upon referral by PCPs, patients undergo a 2-week diagnostic screening procedure (both at home and at hospital). A computed tomographic scan and various blood tests are performed. Results are discussed at an interdisciplinary team meeting, where a definitive diagnosis is made and a treatment plan is formulated. Advice to PCPs can vary (e.g. adaptation of medication, improvement of sensory function by ear syringing or testing eyesight, further referral to other hospital departments and to paramedical disciplines, and advice to initiate extra care such as nursing home care, respite care or services like 'meals on wheels'). <u>PCP collaboration:</u> In addition to enlisting patients referred to the program by PCPs, following screening and treatment plan formulation, the PCP is sent a summary of the assessments, the multi-axis diagnosis, and recommendations for treatment and management; thereafter, the PCP is responsible for the patient even though further investigations might have been recommended.		improvement in HRQoL. <u>Functional status</u> : The groups did not differ in terms of clinical outcome measures. <u>Community tenure:</u> NR <u>Survival</u> : NR	
PSYCHIATRIC POPULATION Enguidanos et US al.(2005) <sup>RefiD298</sup>	65+, frail elderly with moderate or severe depression.	Program name:Geriatric Care Management (GCM) program.Key components:Stepped-care treatment protocol adapted from the IMPACT program (a disease management program for treating late-life depression in primary care, described below). Primary treatment consists of Problem Solving Therapy (a patient-centered cognitive behavior approach) or antidepressants as the primary treatments. If patients are unresponsive to treatments, a psychiatrist consultation is sought. The intervention is delivered by either of the 2 geriatric care managers (1 social worker, 1 public health nurse), but cases are discussed in a team approach at bi-monthly case conferences	Entry: Referral (multiple sources, incl. health care professionals, community service agencies, caregivers/family members, self- referral). Exit: NR Barriers/facilitators: NR	Evaluation design: RCT (n=170) evaluating integrated depression care management to usual care. Quality of life: NR Functional status: No difference with respect to scores assessing ADL, depression, or cognitive status. Community tenure: NR Survival: NR	NR

DOC-PG group showed a clinically relevant

Koh et al. (2002) <sup>Ref ID 408</sup>	US (specific catchment area of New York City)	60+, homebound, suffer from a psychiatric illness, unable or unwilling to access mental health services	(attended by case managers, a geriatrician, the GCM Program Manager, and occasionally a psychiatrist). PCP collaboration: Depression treatment is coordinated with the PCP who provides patients with prescriptions for antidepressant medications, with consultation from the psychiatrist if needed (NB: unclear extent of PCP involvement for patients only receiving Problem Solving Therapy). Program name: The Mental Health Outreach Program for the Homebound elderly (HEP). Key components: A multidisciplinary psychiatric mobile team to address patients medical and social needs. Services provided by: 1 psychiatrist, 1 internist, 2 psychiatric social workers, 1 metal health aide, 1 master's degree-level gerontologist, >1 medical residents, >1 students in medicine, nursing, occupational therapy, social work, and public health. Comprehensive service consists of assessment, acute intervention, case management, and ongoing treatment. Following eligibility visit (see referrals next column) receive preliminary assessment: 1) psychiatrist conducts a psychiatric exam, and determines the need for treatment; 2) medical evaluation (incl. physical, ECG, lab studies). Following preliminary assessment, entire team develops a comprehensive treatment plan (incl. regularly scheduled psychiatric, medical, and social work visits delivered to the patient at home; focus on psychopharmacological, psychotherapeutic, psychosocial, and family interventions). PCP collaboration: A close alliance is established with the patients PCP (note: when a patient does	Entry: From community sources; screened over phone. Social worker staff performs initial home visit to assess psychosocial situation and verify program eligibility. Exit: When the client no longer requires the intensity of in-home treatment, they are referred to a more traditional out-patient service. Barriers/facilitators: No information with respect to collaboration with PCP specifically.	Evaluation design: Descriptive pre-post program evaluation using case records and semi- structured interview of 93 elderly patients referred to HEP during its first 2.5yrs. Quality of life: NR Functional status: Increase in Global Assessment of Function (GAF) scores; resolution of psychiatric condition or ability to be transferred to outpatient treatment by 20% of enrolled patients. Community tenure: Only 16% of enrolled patients were not able to be maintained in the community. Survival: NR	NR
Llewellyn-Jones et	Australia (Sydney)	Elderly in	<u>PCP collaboration:</u> A close alliance is established with the patients PCP (note: when a patient does not have a PCP, efforts are made to link the patient with a provider; as a last resort, the team's internist assumes the role). <u>Program name</u> : NR	Entry: The intervention was implemented in	Evaluation design: Cohort study (n=1,036).	NR

al.(2001) <sup>RefiD426</sup>		residential care with depression.	Key components: A multifaceted shared-care intervention for late-life depression. Multidisciplinary collaboration between PCPs, residential care facility health care providers, and the local psychogeriatric service; training for PCP and other facility health care providers about detecting and managing depression; and depression-related health education/promotion programs for residents. PCP collaboration: See above.	the entire non-nursing home population of a large, multilevel, continuing-care retirement community. <u>Exit</u> : NR <u>Barriers/facilitators</u> : Improved communication between PCPs and the management, other health care providers, and staff of the facility was considered a facilitator.	Quality of life: NR Functional status: NR Community tenure: NR Survival: NR	
OTHER			<u>rer conaboration.</u> See above.			
Peeters et al.(2007) <sup>RefiD212</sup>	The Netherlands (Amsterdam)	65+, at high risk of recurrent falling	<u>Program name:</u> NR <u>Key components:</u> Extended multidisciplinary fall- risk assessment will be conducted to determine patients' modifiable risk factors, which in turn will inform a tailored treatment regimen aimed at the reduction of fall risk. The intervention involves cooperation between the PCP, geriatrician, physical therapist and occupational therapist; other specialties may be included depending on patient characteristics.	<u>Entry</u> : Patients are referred following a fall event that led them to consult the emergency department or PCP. <u>Exit</u> : Length of intervention unclear (may be individual based on individualized approach); RCT follow-up ends at 12 months. <u>Barriers/facilitators</u> : NR	<u>Evaluation design</u> : RCT (n=200 planned). <u>Quality of life</u> : To be evaluated. <u>Functional status</u> : To be evaluated. <u>Community tenure:</u> NR <u>Survival</u> : NR	To be evaluated.
			<u>PCP collaboration</u> : The PCP is directly involved in the collaborative intervention; however the exact processes of the collaboration are unclear. For example, it is not clear if from this program's perspective, the PCP is a part of the SGS (i.e. is the primary case manager for the patient), or collaborating with it.			

ALC: alternate level of care; HRQoL: Health-related quality of life; PCP: primary care physician; QUALY: Quality-adjusted life years; RCT: randomized controlled trial; SGS: specialized geriatric service

#### 2. References of studies/reports summarized (n=27)

**Ref ID:78.** Blewett, L. A., Johnson, K., McCarthy, T., Lackner, T., and Brandt, B.. Improving geriatric transitional care through inter-professional care teams. Journal of Evaluation in Clinical Practice 2010. 16 (1) 57

**Ref ID:90.** Hebert, R., Raiche, M., Dubois, M. F., Gueye, N. R., Dubuc, N., Tousignant, M., and PRISMA Group... Journals of Gerontology Series B-Psychological Sciences & Social Sciences 2010. 65B (1) 107

**Ref ID:98.** Eloniemi-Sulkava, U., Saarenheimo, M., Laakkonen, M. L., Pietila, M., Savikko, N., Kautiainen, H., Tilvis, R. S., and Pitkala, K. H.. Family care as collaboration: effectiveness of a multicomponent support program for elderly couples with dementia. Randomized controlled intervention study. Journal of the American Geriatrics Society 2009. 57 (12) 2200

**Ref ID:103.** Li, G. K., Phillips, C., and Weber, K.. On Lok: a successful approach to aging at home. Healthcarepapers 2009. 10 (1) 44

**Ref ID:130.** De, Stampa M., Vedel, I., Bergman, H., Novella, J. L., and Lapointe, L.. Fostering participation of general practitioners in integrated health services networks: incentives, barriers, and guidelines. BMC Health Services Research 2009. 9 (#Issue#) 48

**Ref ID:150.** Ganz, D. A., Fung, C. H., Sinsky, C. A., Wu, S., and Reuben, D. B.. Key elements of high-quality primary care for vulnerable elders. Journal of General Internal Medicine 2008. 23 (12) 2018

**Ref ID:155.** Fairhall, N., Aggar, C., Kurrle, S. E., Sherrington, C., Lord, S., Lockwood, K., Monaghan, N., and Cameron, I. D.. Frailty Intervention Trial (FIT). BMC Geriatrics 2008. 8 (#Issue#) 27

**Ref ID:181**. Wolfs, C. A., Kessels, A., Dirksen, C. D., Severens, J. L., and Verhey, F. R.. Integrated multidisciplinary diagnostic approach for dementia care: randomised controlled trial. British Journal of Psychiatry 2008. 192 (4) 300

**Ref ID:212.** Peeters, G. M., de Vries, O. J., Elders, P. J., Pluijm, S. M., Bouter, L. M., and Lips, P.. Prevention of fall incidents in patients with a high risk of falling: design of a randomised controlled trial with an economic evaluation of the effect of multidisciplinary transmural care. BMC Geriatrics 2007. 7 (#Issue#) 15

**Ref ID:220.** Wright, K., Hazelett, S., Jarjoura, D., and Allen, K.. The AD-LIFE trial: working to integrate medical and psychosocial care management models. [Review] [13 refs]. Home Healthcare Nurse 2007. 25 (5) 308

**Ref ID:270.** Beland, F., Bergman, H., Lebel, P., Clarfield, A. M., Tousignant, P., Contandriopoulos, A. P., and Dallaire, L. A system of integrated care for older persons with disabilities in Canada: results from a randomized controlled trial. Journals of Gerontology Series A-Biological Sciences & Medical Sciences 2006. 61 (4) 367

**Ref ID:272.** Yaggy, S. D., Michener, J. L., Yaggy, D., Champagne, M. T., Silberberg, M., Lyn, M., Johnson, F., and Yarnall, K. S.. Just for Us: an academic medical center-community partnership to maintain the health of a frail low-income senior population. Gerontologist 2006. 46 (2) 271

**Ref ID:273.** Mukamel, D. B., Temkin-Greener, H., Delavan, R., Peterson, D. R., Gross, D., Kunitz, S., and Williams, T. F.. Team performance and risk-adjusted health outcomes in the Program of All-Inclusive Care for the Elderly (PACE). Gerontologist 2006. 46 (2) 227

**Ref ID:282.** Fisher, H. M. and McCabe, S.. Managing chronic conditions for elderly adults: the VNS CHOICE model. Health Care Financing Review 2005. 27 (1) 33

**Ref ID:283.** Milette, L., Hebert, R., and Veil, A.. Integrated service delivery networks for seniors: early perceptions of family physicians. Canadian Family Physician 2005. 51 (#Issue#) 1104

**Ref ID:298.** Enguidanos, S. M., Davis, C., and Katz, L.. Shifting the paradigm in geriatric care management: moving from the medical model to patient-centered care. Social Work in Health Care 2005. 41 (1)

**Ref ID:313.** Templeton, V. H.. Dementia care: an outpatient, community-based, multi-disciplinary approach. North Carolina Medical Journal 2005. 66 (1) 64

**Ref ID:331.** Nadash, P.. Two models of managed long-term care: comparing PACE with a Medicaid-only plan. Gerontologist 2004. 44 (5) 644

**Ref ID:356.** Fitzgerald, P., Morgan, A., and Morris, T.. Rural policy development: an NRHA and PACE association collaborative model. Journal of Rural Health 2004. 20 (1) 92

**Ref ID:408.** Kohn, R., Goldsmith, E., and Sedgwick, T. W.. Treatment of homebound mentally ill elderly patients: the multidisciplinary psychiatric mobile team. American Journal of Geriatric Psychiatry 2002. 10 (4) 469

**Ref ID:410.** Kane, R. L., Homyak, P., and Bershadsky, B.. Consumer reactions to the Wisconsin Partnership Program and its parent, the Program for All-Inclusive Care of the Elderly (PACE). Gerontologist 2002. 42 (3) 314

**Ref ID:426.** Llewellyn-Jones, R. H., Baikie, K. A., Castell, S., Andrews, C. L., Baikie, A., Pond, C. D., Willcock, S. M., Snowdon, J., and Tennant, C. C.. How to help depressed older people living in residential care: a multifaceted shared-care intervention for late-life depression. International Psychogeriatrics 2001. 13 (4) 477

**Ref ID:460.** Wieland, D., Lamb, V. L., Sutton, S. R., Boland, R., Clark, M., Friedman, S., Brummel-Smith, K., and Eleazer, G. P.. Hospitalization in the Program of All-Inclusive Care for the Elderly (PACE): rates, concomitants, and predictors.[Erratum appears in J Am Geriatr Soc. 2001 Jun;49(6):835; PMID: 11454128]. Journal of the American Geriatrics Society 2000. 48 (11) 1373

**Ref ID:551.** Hirth, V., Baskins, J., and Dever-Bumba, M.. Program of All-Inclusive Care (PACE): Past, Present, and Future. Journal of the American Medical Directors Association 2009. 10 (3) 155

**Ref ID:564.** Bowles, S. K.. Practice spotlight: Collaborative care of the elderly. Canadian Journal of Hospital Pharmacy 2008. 61 (6) 437

**Ref ID:624.** Crotty, M., Halbert, J., Rowett, D., Giles, L., Birks, R., Williams, H., and Whitehead, C.. An outreach geriatric medication advisory service in residential aged care: A randomised controlled trial of case conferencing. Age and Ageing 2004. 33 (6) 612

**Ref ID:650.** Fisher, H. M. and Raphael, T. G.. Managed long-term care: Care integration through care coordination. Journal of Aging and Health 2003. 15 (1) 223

#### 3. References of potentially relevant reviews (abstracts included, n=41)

#### Ref ID: 4

# Macadam, M. (2011). Progress toward integrating care for seniors in Canada: "We have to skate toward where the puck is going to be, not to where it has been.". International Journal of Integrated Care [Electronic Resource], 11 Spec Ed, e016.

Abstract: INTRODUCTION: Integrating care is a developing feature of provincial health delivery in Canada for those with chronic conditions. The purposes of this project were to review the conceptual understandings underlying integrated care, examine the features of models of cost-effective care for the elderly, and then ascertain to what extent Canadian provinces were implementing these features. METHOD: These goals were accomplished through a review of the integrated care literature followed by a survey of the Canadian provinces. A pretested questionnaire was sent to each of the 10 provincial Ministries of Health in 2008. The questionnaire collected basic background information and then asked a series of open- and close-ended questions about each of the best practice features of integrated care as found in the literature review. RESULTS: System improvements in integrating care for the elderly are being implemented in Canadian provincial health care systems. There has been substantial improvement in the delivery of case management services but the supply of some community services could be improved. As well, the linkages amongst primary, acute and community care remain weak. DISCUSSION AND CONCLUSION: Providing an adequate supply of services is an ongoing issue in many provinces and could be the result of either inadequate funding and/or poor targeting of scarce resources. While it is promising that so many provinces are starting to break down the silos amongst types of health care service providers, much remains to be accomplished. These issues are at the core of integrating care and are among the challenges being faced by other countries

#### Ref ID: 8

### Low, L. F., Yap, M., & Brodaty, H. (2011). A systematic review of different models of home and community care services for older persons. BMC Health Services Research, 11, 93.

Abstract: UNLABELLED: ABSTRACT: BACKGROUND: Costs and consumer preference have led to a shift from the long-term institutional care of aged older people to home and community based care. The aim of this review is to evaluate the outcomes of case managed, integrated or consumer directed home and community care services for older persons, including those with dementia. METHODS: A systematic review was conducted of non-medical home and community care services for frail older persons. MEDLINE, PsycINFO, CINAHL, AgeLine, Scopus and PubMed were searched from 1994 to May 2009. Two researchers independently reviewed search results. RESULTS: Thirty five papers were included in this review. Evidence from randomized controlled trials showed that case management improves function and appropriate use of medications, increases use of community services and reduces nursing home admission. Evidence, mostly from non-randomized trials, showed that integrated care increases service use; randomized trials reported that integrated care increases service use; randomized trials reported that integrated care increases service use but has little effect on clinical outcomes. Studies were heterogeneous in methodology and results were not consistent. CONCLUSIONS: The outcomes of each model of care differ and correspond to the model's focus. Combining key elements of all three models may maximize outcomes

#### Ref ID: 23

#### Ahmed, A. (2002). Quality and outcomes of heart failure care in older adults: role of multidisciplinary diseasemanagement programs. Journal of the American Geriatrics Society, 50, 1590-1593.

Abstract: PURPOSE: To determine whether the management of heart failure by specialized multidisciplinary heart failure disease-management programs was associated with improved outcomes. BACKGROUND: The advent of angiotensinconverting enzyme inhibitors, beta-blockers, and spironolactone has revolutionized the management of heart failure. Randomized double-blind studies have demonstrated survival benefits of these drugs in heart failure patients. Nevertheless, in spite of these advances, heart failure continues to be a syndrome of poor outcomes.1-4 There is also evidence that a significant portion of heart failure patients does not receive this evidence-based therapy that reduces morbidity and mortality.5-7 Various disease-management programs have been proposed and tested to improve the quality of heart failure care. Most of these programs are specialized multidisciplinary heart failure clinics lead by cardiologists or heart failure specialists and conducted by nurses or nurse practitioners. Similar to the Department of Veterans Affairs (VA) multidisciplinary geriatric assessment clinics, these clinics also use many other services, including pharmacists, dietitians, physical therapists, and social workers. Some of these programs also have an affiliated home health service. Several observation studies, using mostly pre- and postcomparison designs, have demonstrated the effectiveness of these programs in the process of care, resource use, healthcare costs, and clinical outcomes in patients with heart failure.8 Risk of hospitalization was reduced by 50% to 85% in six of the studies.8 Subsequently, several randomized trials were conducted to determine the effectiveness of these programs. The purpose of this systematic review was to determine the effectiveness of these programs on mortality and hospitalization rates of heart failure patients. METHODS: Published articles on human randomized trials involving specialized heart failure diseasemanagement programs in all languages were searched using Medline from 1966 to 1999 and other online databases using the following terms and Medical Subject Headings: case management (exp); comprehensive health care (exp); disease management (exp); health services research (exp); home care services (exp); clinical protocols (exp); patient care planning (exp); quality of health care (exp); nurse led clinics; special clinics; and heart failure, congestive (exp). In addition, a manual search of the bibliographies of searched articles was performed to identify articles otherwise missed in the above search. Personal communications were made with three authors to obtain further data on their studies. Using a data abstraction tool, two of the investigators separately abstracted data from the selected articles. Data from the selected studies were combined using the DerSimonian and Laird random effects model and the Mantel-Haenszel-Peto fixed effects model. Meta-Analyst 0.998 software (J. Lau, New England Medical Center, Boston, MA) was used to determine risk ratios (RRs) with 95% confidence intervals (CIs) of mortality and hospitalization for patients receiving care through these specialized programs compared with those receiving usual care. The Cochran Q test was used to test heterogeneity among the studies, and sensitivity analyses were performed to examine the effect of various covariates, such as duration of intervention, and other characteristics of the disease-management programs. RESULTS: The original search resulted in 416 published articles, of which 35 met preliminary selection criteria. Of these, 11 were randomized trials and were selected for the meta-analysis. Studies that were not randomized trials, did not involve heart failure patients or diseasemanagement programs, or had missing outcomes were excluded. Of the 11 studies selected, nine involved specialized follow-up using multidisciplinary teams and the remaining two involved follow-up by primary care physicians and telephone. These studies involved 1,937 heart failure patients with a mean age of 74. The follow-up period ranged from no follorom no follow-up (one study) to 1 year (one study). Patients receiving care from specialized heart failure diseasemanagement programs had a 13% lower risk of hospitalization than those receiving usual care (summary RR = 0.87; 95% CI = 0.79 -0.96), but the Cochran Q test demonstrated significant heterogeneity among the studies (P = .003). Subgroup analysis of the nine studies using specialized follow-up by a multidisciplinary team showed similar results (summary RR = 0.77, 95% CI = 0.68-0.86; test of heterogeneity, P>.50). Seven of the nine studies did not show any significant association between intervention and reduced hospitalization, but the two studies that used follow up by primary care physicians and telephone failed to show any significant reduction in hospitalization (summary RR = 0.94, 95% CI = 0.75-1.19). In fact, one of the studies demonstrated a higher risk of hospitalization for patients receiving intervention (RR = 1.26, 95% CI = 1.04-1.52). Of the 11 studies, only six reported mortality as an outcome. None of these studies found any association between intervention and mortality (summary RR = 1.15, 95% CI = 0.96-1.37; test of heterogeneity, P>.15). Five of the studies used quality of life or functional status as outcomes, and, of them, only one demonstrated significant positive association. The results of the sensitivity analyses were negative for any significant association with duration of intervention or follow-up or year of study. Eight studies performed cost analyses and seven demonstrated cost-effectiveness of the intervention. CONCLUSIONS: The authors concluded that specialized disease-management programs were cost-effective, and heart failure patients cared for by these programs were more likely to undergo fewer hospitalizations, but the study did not provide any conclusive association between these programs and quality of care or mortality. The authors recommend that disease-management programs involve patient education and specialized follow-up by a multidisciplinary team including home health care.

#### Ref ID: 37

### Kuzmarov, I. W. & Ferrante, A. (2011). The development of anti-cancer programs in Canada for the geriatric population: an integrated nursing and medical approach. [Review]. Aging Male, 14, 4-9.

Abstract: Cancer control in Canada refers to the development of comprehensive programs utilising modern techniques, tools and approaches that actively prevent, cure or manage cancer. The scope of such programs is quite vast. They range from prevention, early detection and screening, comprehensive treatment both curative and palliative to comprehensive palliative care. Cancer is a disease associated with the aging population, and as the population ages the incidence of cancer would be expected to rise as well. This in itself poses a great challenge. In addition, the aging population demographics with the projected rise in the numbers of senior citizens, especially the over 80 group in the next decade, poses its own creative challenges to health planners. In Canada, health care is centrally administered, and controlled by

the provincial governments of Canada, under the Canada Health Act. The challenge of developing comprehensive programs for the geriatric population requires changes in the care models and care pathways. The patient-centred models that have been adapted require a multidisciplinary approach to the clientele and their families that integrates cancer therapy and geriatric care and realities. This requires changes in the nursing and medical approach, as well as education in the subtleties of the two intersecting medical realities

#### Ref ID: 97

# Boult, C., Green, A. F., Boult, L. B., Pacala, J. T., Snyder, C., & Leff, B. (2009). Successful models of comprehensive care for older adults with chronic conditions: evidence for the Institute of Medicine's "retooling for an aging America" report. [Review] [142 refs]. Journal of the American Geriatrics Society, 57, 2328-2337.

Abstract: The quality of chronic care in America is low, and the cost is high. To help inform efforts to overhaul the ailing U.S. healthcare system, including those related to the "medical home," models of comprehensive health care that have shown the potential to improve the guality, efficiency, or health-related outcomes of care for chronically ill older persons were identified. Using multiple indexing terms, the MEDLINE database was searched for articles published in English between January 1, 1987, and May 30, 2008, that reported statistically significant positive outcomes from high-quality research on models of comprehensive health care for older persons with chronic conditions. Each selected study addressed a model of comprehensive health care; was a meta-analysis, systematic review, or trial with an equivalent concurrent control group; included an adequate number of representative, chronically ill participants aged 65 and older; used valid measures; used reliable methods of data collection; analyzed data rigorously; and reported significantly positive effects on the quality, efficiency, or health-related outcomes of care. Of 2,714 identified articles, 123 (4.5%) met these criteria. Fifteen models have improved at least one outcome: interdisciplinary primary care (1), models that supplement primary care (8), transitional care (1), models of acute care in patients' homes (2), nurse-physician teams for residents of nursing homes (1), and models of comprehensive care in hospitals (2). Policy makers and healthcare leaders should consider including these 15 models of health care in plans to reform the U.S. healthcare system. The Centers for Medicare and Medicaid Services would need new statutory flexibility to pay for care by the nurses, social workers, pharmacists, and physicians who staff these promising models. [References: 142]

#### Ref ID: 120

## Eklund, K. & Wilhelmson, K. (2009). Outcomes of coordinated and integrated interventions targeting frail elderly people: a systematic review of randomised controlled trials. [Review] [34 refs]. Health & Social Care in the Community, 17, 447-458.

Abstract: The aim of this study was to review randomised controlled trials on integrated and coordinated interventions targeting frail elderly people living in the community, their outcome measurements and their effects on the client, the caregiver and healthcare utilisation. A literature search of PubMed, AgeLine, Cinahl and AMED was carried out with the following inclusion criteria: original article; integrated intervention including case management or equivalent coordinated organisation; frail elderly people living in the community; randomised controlled trials; in the English language, and published in refereed journals between 1997 and July 2007. The final review included nine articles, each describing one original integrated intervention study. Of these, one was from Italy, three from the USA and five from Canada. Seven studies reported at least one outcome measurement significantly in favour of the intervention, one reported no difference and one was in favour of the control. Five of the studies reported at least one outcome on client level in favour of the intervention. Only two studies reported caregiver outcomes, both in favour of the intervention for caregiver satisfaction, but with no effect on caregiver burden. Outcomes focusing on healthcare utilisation were significantly in favour of the intervention in five of the studies. Five of the studies used outcome measurements with unclear psychometric properties and four used disease-specific measurements. This review provides some evidence that integrated and coordinated care is beneficial for the population of frail elderly people and reduces health care utilisation. There is a lack of knowledge about how integrated and coordinated care affects the caregiver. This review pinpoints the importance of using valid outcome measurements and describing both the content and implementation of the intervention. [References: 34]

#### Ref ID: 121

### Callahan, C. M., Boustani, M., Sachs, G. A., & Hendrie, H. C. (2009). Integrating care for older adults with cognitive impairment. [Review] [91 refs]. Current Alzheimer Research, 6, 368-374.

Abstract: The number of older adults with Alzheimer's disease and related disorders is expected to triple over the next 50 Page 18 of 51 years. While we may be on the cusp of important therapeutic advances, such advances will not alter the disease course for millions of persons already affected. Hoping for technology to spare the health care system from the need to care for older adults with dementia is no longer tenable. Most older adults with dementia will receive their medical care in the primary care setting and this setting is not prepared to provide for the complex care needs of these vulnerable elders. With an increasing emphasis on earlier diagnosis of dementia, primary care in particular will come under increasing strain from this new care responsibility. While primary care may remain the hub of care for older adults, it cannot and should not be the whole of care. We need to design and test new models of care that integrate the larger health care system including medical care as well as community and family resources. The purpose of this paper to describe the current health care infrastructure with an emphasis on the role of primary care in providing care for older adults with dementia. We summarize recent innovative models of care seeking to provide an integrated and coordinated system of care for older adults with dementia. We present the case for a more aggressive agenda to improving our system of care for older adults with dementia through greater training, integration, and collaboration of care providers. This requires investments in the design and testing of an improved infrastructure for care that matches our national investment in the search for cure. [References: 91]

#### Ref ID: 137

# Chang-Quan, H., Bi-Rong, D., Zhen-Chan, L., Yuan, Z., Yu-Sheng, P., & Qing-Xiu, L. (2009). Collaborative care interventions for depression in the elderly: a systematic review of randomized controlled trials. [Review] [35 refs]. Journal of Investigative Medicine, 57, 446-455.

Abstract: OBJECTIVE: To determine the effective components and the feasibility of collaborative care interventions (CCIs) in the treatment of depression in older patients. METHODS: Systematic review of randomized controlled trials, in which CCIs were used to manage depression in patients aged 60 or older. RESULTS: We identified 3 randomized controlled trials involving 3930 participants, 2757 of whom received CCIs and the others received usual care. Collaborative care interventions were more effective in improving depression symptoms than usual care during each follow-up period. Compared with baseline, thoughts of suicide in subjects receiving CCIs significantly decreased (odds Ratio [OR], 0.52; 95% confidence intervals [CI], 0.35-0.77), but not that in those receiving usual care (OR, 0.85; 95% CI, 0.50-1.43). Subjects receiving CCIs were significantly more likely to report depression treatment (including any antidepressant medication and psychotherapy) than those receiving usual care during each follow-up period. Collaborative care interventions significantly increased depression-free days, but did not significantly increase outpatient cost. At 6 and 12 months postintervention, compared with those receiving usual care, participants receiving CCIs had lower levels of depression symptoms and thoughts of suicide. Moreover, participants receiving CCIs were significantly more likely to report antidepressant medication treatment, but were not significantly more likely to report psychotherapy. Collaborative care interventions with communication between primary care providers and mental health providers were no more effective in improving depression symptoms than CCIs without such communication. CONCLUSIONS: Collaborative care interventions are more effective for depression in older people than usual care and are also of high value. Antidepressant medication is a definitely effective component of CCIs, but communication between primary care providers and mental health providers seems not to be an effective component of CCIs. The effect of psychotherapy in CCIs should be further explored. [References: 35]

#### Ref ID: 144

### Dobell, L. G. & Newcomer, R. J. (2008). Integrated care: incentives, approaches, and future considerations. Social Work in Public Health, 23, 25-47.

Abstract: The research and demonstration programs sponsored by CMS collectively address all the dimensions of the continuum of care ranging across multiple settings of care, providers, disease types, and severity of conditions. This article reviews current CMS activities and discusses several delivery programs in local communities that include disease management and the Program in All-Inclusive Care for the Elderly (PACE) and the contributions these have made to care integration and social policy development. Methods for accelerating knowledge development affecting the development of social policy, particularly collaborative efforts with PACE programs at the local level are discussed

#### Ref ID: 145

### Lynch, M., Hernandez, M., & Estes, C. (2008). PACE: has it changed the chronic care paradigm?. [Review] [45 refs]. Social Work in Public Health, 23, 3-24.

Abstract: The Program of All-inclusive Care for the Elderly (PACE) grew out of a small community organization in San

Francisco and has been replicated by non-profit organizations in a number of other communities across the country. The authors review the successes of PACE as reported in the literature and discuss reasons for its limited growth as well as its significant influence on state and federal long term care policy. They argue that PACE has significantly changed how we think of long term care through its pioneering work fully integrating medical and long term care. PACE has also provided an influential model for breaking down the funding silos that characterize the medical and long term care services arena. State Medicaid agencies and Medicare have learned from PACE. Health plans and private long term insurers may also still learn from PACE. However, the fact that only a little more than 10,000 elders have enrolled in PACE nationwide prevents the authors from finding that PACE has brought about significant structural change in a long term care industry dominated by for-profit nursing homes. [References: 45]

#### Ref ID: 189

### Skultety, K. M. & Rodriguez, R. L. (2008). Treating geriatric depression in primary care. [Review] [46 refs]. Current Psychiatry Reports, 10, 44-50.

Abstract: Depression, a significant problem among older adults, is most commonly reported in the primary care setting. To offer the treatments for depression preferred by many older adults, clinical providers and researchers have called for the creation of integrative psychosocial care options in primary care, using mental health providers working in collaboration with medical providers. In this article, we examine the empirical status of integrating treatment for depression in older adults in the primary care setting by summarizing the current models of integrated care and latest research developments. We discuss the strengths and limitations of the current integration models and offer recommendations for expanding work in this important area. [References: 46]

#### Ref ID: 204

### Snowdon, J. (2007). Psychogeriatric services in the community and in long-term care facilities: needs and developments. [Review] [57 refs]. Current Opinion in Psychiatry, 20, 533-538.

Abstract: PURPOSE OF REVIEW: An increasing proportion of the world's population is over the age of 65 years. Specialist mental health services for older people have been developed in many countries. The way services develop depends partly on how healthcare arrangements have evolved in that jurisdiction, as well as on finances, culture and attitudes towards elderly and disabled individuals. Health planners in developing countries recognize that considerable increases in their elderly populations and numbers of individuals with disability are imminent. It will be important to ensure that older people with mental disorders receive appropriate treatment. This review discusses recent findings and observations about psychogeriatric services in the community and in long-term care facilities, and aims to suggest how to improve or develop such services. RECENT FINDINGS: The prevalence of mental disorders in long-term care facilities is high, but services to deal with them are usually not optimal. When appropriately staffed and organized, community psychogeriatric services, day care and collaborative care can be effective in reducing mental health problems and preventing admissions. SUMMARY: Recent reviews and research have provided useful guidance regarding aspects of current psychogeriatric services that work well and those that need to be improved. A person-centred approach is favoured. [References: 57]

#### Ref ID: 209

# Halbert, J., Crotty, M., Whitehead, C., Cameron, I., Kurrle, S., Graham, S. et al. (2007). Multi-disciplinary rehabilitation after hip fracture is associated with improved outcome: A systematic review. [Review] [25 refs]. Journal of Rehabilitation Medicine, 39, 507-512.

Abstract: BACKGROUND: While hip fractures are an important cause of disability, dependency and death in older adults, the benefit of multi-disciplinary rehabilitation for people who have sustained hip fracture has not been demonstrated. METHODS: Systematic review of randomized controlled trials which compare co-ordinated multi-disciplinary rehabilitation with usual orthopaedic care in older people who had sustained a hip fracture. Outcome measures included: mortality, return home, "poor outcome", total length of hospital stay, readmissions and level of function. RESULTS: We identified 11 trials including 2177 patients. Patients who received multi-disciplinary rehabilitation were at a lower risk (Risk Ratio 0.84, 95% CI 0.73-0.96) of a "poor outcome" - that is dying or admission to a nursing home at discharge from the programme, and showed a trend towards higher levels of return home (Risk Ratio 1.07, 95% CI 1.00-1.15). Pooled data for mortality did not demonstrate any difference between multi-disciplinary rehabilitation and usual orthopaedic care. CONCLUSION: This is the first review of randomized trials to demonstrate a benefit from multi-disciplinary rehabilitation; a 16% reduction in the pooled outcome combining death or admission to a nursing home. This result

supports the routine provision of organized care for patients following hip fracture, as is current practice for patients after stroke. [References: 25]

#### Ref ID: 225

McEvoy, P. & Barnes, P. (2007). Using the chronic care model to tackle depression among older adults who have longterm physical conditions. [Review] [38 refs]. Journal of Psychiatric & Mental Health Nursing, 14, 233-238. Abstract: Effective psychological and pharmacological treatments are available, but for depressed older adults with longterm physical conditions, the outcome of routine care is generally poor. This paper introduces the chronic care model, a systemic approach to quality improvement and service redesign, which was developed by Ed Wagner and colleagues. The model highlights six key areas that need to be addressed, if depression is to be tackled more effectively in this neglected patient group: delivery system design, patient-provider relationships, decision support, clinical information systems, community resources and healthcare organization. Three influential programmes, the Improving Mood Promoting Access to Collaborative Treatment programme, the Prevention of Suicide in Primary Care Elderly Collaborative Trial, and the Program to Encourage Active, and Rewarding Lives for Seniors, have shown that when the model is adopted, significant improvements in outcomes can be achieved. The paper concludes with a case study, which illustrates the difference that adopting the chronic care model can make. Radical changes in working practices may be required, to implement the model in practice. However, Greg Simon, a leading researcher in the field of depression care, has suggested that there is already sufficient evidence to justify a shift in emphasis from research towards dissemination and implementation. [References: 38]

#### Ref ID: 242

Britton, A. & Russell, R. (2006). WITHDRAWN: Multidisciplinary team interventions for delirium in patients with chronic cognitive impairment. [Review] [29 refs][Update of Cochrane Database Syst Rev. 2004;(2):CD000395; PMID: 15106152]. Cochrane Database of Systematic Reviews, CD000395.

Abstract: BACKGROUND: Delirium is common in hospitalized elderly people. Delirium may affect 60% of frail elderly people in hospital. Among the cognitively impaired, 45% have been found to develop delirium and these patients have longer lengths of hospital stay and a higher rate of complications which, with other factors, increase costs of care. The management of delirium has commonly been multifaceted, the primary emphasis has to be on the diagnosis and therapy of precipitating factors, but as these may not be immediately resolved, symptomatic and supportive care are also of major importance. OBJECTIVES: The objective of this review is to assess the available evidence for the effectiveness, if any, of multidisciplinary team interventions in the coordinated care of elderly patients with delirium superimposed on an underlying chronic cognitive impairment in comparison with usual care. SEARCH STRATEGY: The trials were identified from a last updated search of the Specialized Register of the Cochrane Dementia and Cognitive Improvement Group on 3 July 2003 using the terms delirium and confus\* . The Register is regularly updated and contains records of all major health care databases and many ongoing trial databases. SELECTION CRITERIA: Selection for possible inclusion in this review was made on the basis of the research methodology - controlled trials whose participants are reported as having chronic cognitive impairment, and who then developed incident delirium and were randomly assigned to either coordinated multidisciplinary care or usual care. DATA COLLECTION AND ANALYSIS: Nine controlled trials were identified for possible inclusion in the review, only one of which met the inclusion criteria. At present the data from that study cannot be analysed. We have requested additional data from the authors and are awaiting their reply. MAIN RESULTS: No studies focused on patients with prior cognitive impairment, so management of delirium in this group could not be assessed. There is very little information on the management of delirium in the literature despite an increasing body of information about the incidence, risks and prognosis of the disorder in the elderly population. AUTHORS' CONCLUSIONS: The management of delirium needs to be studied in a more clearly defined way before evidence-based guidelines can be developed. Insufficient data are available for the development of evidence-based guidelines on diagnosis or management. There is scope for research in all areas - from basic pathophysiology and epidemiology to prevention and management. Though much recent research has focused on the problem of delirium, the evidence is still difficult to utilize in management programmes. Research needs to be undertaken targeting specific groups known to be at high risk of developing delirium, for example the cognitively impaired and the frail elderly. As has been highlighted by Inouye 1999, delirium has very important economic and health policy implications and is a clinical problem that can affect all aspects of care of an ill older person. Delirium, though a frequent problem in hospitalized elderly patients, is still managed empirically and there is no evidence in the literature to support change to current practice at this time. [References: 29]

#### Skultety, K. M. & Zeiss, A. (2006). The treatment of depression in older adults in the primary care setting: an evidencebased review. [Review] [60 refs]. Health Psychology, 25, 665-674.

Abstract: The objective of this study was to conduct an evidence-based review of treatments for depression in older adults in the primary care setting. A literature search was conducted using PsycINFO and Medline to identify relevant, English language studies published from January 1994 to April 2004 with samples aged 55 and older. Studies were required to be randomized controlled trials that compared psychosocial interventions conducted within the primary care setting with "usual care" conditions. Eight studies with older adult samples met inclusion criteria and were included in the review. Two treatment models were evident: Geriatric Evaluation Management (GEM) clinics and an approach labeled integrated health care models. Support was found for each model, with improvement in depressive symptoms and better outcomes than usual care; however, findings varied by depression severity, and interventions were difficult to compare. Further efforts to improve research and clinical care of depression in the primary care setting for older adults are needed. The authors recommend the use of interdisciplinary teams and more implementation of psychosocial treatments shown to be effective for older adults. Copyright 2006 APA, all rights reserved. [References: 60]

#### Ref ID: 299

## Kelley-Gillespie, N. (2005). Mobile medical care units: an innovative use of Medicare funding. Journal of Health & Social Policy, 20, 33-48.

Abstract: Medicare is an underutilized payment source for home-delivered health care services for homebound elderly. An innovative service provision for home health care, Mobile Medical Care Units (MMCU), is presented. MMCU consist of a multidisciplinary team of health care professionals who are responsible for following the health care needs of their elderly patients on a continuous long-term basis across settings. This comprehensive care has significant impacts on homebound elderly and the health care industry. MMCU have the potential to be covered more inclusively by primary or supplemental health insurance plans, including Medicare, Medicaid, and HMO's, or by special funding from state aging departments

#### Ref ID: 308

### Cordato, N. J., Saha, S., & Price, M. A. (2005). Geriatric interventions: the evidence base for comprehensive health care services for older people. Australian Health Review, 29, 151-155.

Abstract: Specialist geriatric services apply a comprehensive, multidisciplinary evaluation and management approach to the multidimensional and usually interrelated medical, functional and psychosocial problems faced by at-risk frail elderly people. This paper examines currently available data on geriatric interventions and finds ample evidence supporting both the efficacy and the cost-effectiveness of these specialist interventions when utilised in appropriately targeted patients. It is proposed that substantial investment in these programs is required to meet the future demands of Australia's ageing population

#### Ref ID: 325

### Stock, R. D., Reece, D., & Cesario, L. (2004). Developing a comprehensive interdisciplinary senior healthcare practice. Journal of the American Geriatrics Society, 52, 2128-2133.

Abstract: The PeaceHealth Senior Health and Wellness Center (SHWC) provides primary care coordinated by geriatricians and an interdisciplinary office practice team that addresses the multiple needs of geriatric patients. The SHWC is a hospital outpatient clinic operated as a component of an integrated health system and is focused on the care of frail elders with multiple interacting chronic conditions and management of chronic disease in the healthier older population. Based on the Chronic Care Model, the SHWC strives to enhance coordination and continuity along the continuum of care, including outpatient, inpatient, skilled nursing, long-term care, and home care services. During its development, a patientcentered approach was used to identify senior service needs. The model emphasizes team development, integration of evidence-based geriatric care, site-based care coordination, longer appointment times, "high touch" service qualities, utilization of an electronic medical record across care settings, and a prevention/wellness orientation. This collection of services addresses the interrelationships of all senior issues, including nutrition, social support, spiritual support, caregiver support, physical activity, medications, and chronic disease. The SHWC provides access in an environment sensitive to the special needs of seniors, with a staff trained to meet those needs. The SHWC business model attempts to improve access and quality of care to seniors in a mostly noncapitated healthcare setting, while also attempting to remain financially viable

## Chen, C. C., Kenefick, A. L., Tang, S. T., & McCorkle, R. (2004). Utilization of comprehensive geriatric assessment in cancer patients. [Review] [120 refs]. Critical Reviews in Oncology-Hematology, 49, 53-67.

Abstract: A growing and diverse aging population, recent advances in research on aging and cancer, and the fact that a disproportional burden of cancer still occurs in people aged 65 years and older have generated great interest in delivering better cancer care for older adults. This is particularly true as more survivors of cancer live to experience cancer as a chronic disease. Cancer and its treatment precipitate classic geriatric syndromes such as falls, malnutrition, delirium, and urinary incontinence. Comprehensive Geriatric Assessment (CGA), by taking all patient's needs into account and by incorporating patient's wishes for the level of aggressiveness of treatment, offers a model of integrating medical care with social support services. It holds the promise of controlling health care costs while improving quality of care by providing a better match of services to patient needs. Three decades after the CGA was initially developed in England, oncologists have begun taking notice on the potential benefits that CGA might bring to the field of geriatric oncology. This article describes the utilization of the CGA in cancer patients with an eye toward promoting interdisciplinary care for older cancer patients. To set an initial context, a search of computerized databases took place, using "comprehensive geriatric assessment" and "cancer" as keywords. A selection of literature from between 1980 and 2003 was reviewed. Additional articles were identified through the bibliography of relevant articles. [References: 120]

#### Ref ID: 377

Johri, M., Beland, F., & Bergman, H. (2003). International experiments in integrated care for the elderly: a synthesis of the evidence. [Review] [41 refs]. International Journal of Geriatric Psychiatry, 18, 222-235.

Abstract: BACKGROUND: The OECD countries have recently promoted policies of deinstitutionalisation and communitybased care for the elderly. These policies respond to common cost pressures associated with population aging, and the challenge of providing improved care for the elderly. They aim to substitute less costly services for institutional ones, to improve patient satisfaction and decrease expenses. However, views concerning their success are mixed. We took a comparative cross-national approach to examine the evidence, to identify common features of an effective system of integrated care, and to examine the potential of such models to positively affect care of the elderly, and public finances. METHODS: We conducted a systematic review of recent demonstration projects testing innovative models of care for the elderly in OECD countries. Projects included aimed to create comprehensive integration of acute and long-term care services, and were evaluated using a comparison group. RESULTS: For each project, we report available results on rates of hospitalisation, long term care institutionalisation, utilisation and costs, impact on process of care, and health outcomes. In addition, the following common features of an effective integrated system of care were identified: a single entry point system; case management, geriatric assessment and a multidisciplinary team; and use of financial incentives to promote downward substitution. CONCLUSIONS: Community-based care can impact favourably on rates of institutionalisation and costs. Comprehensive approaches to program restructuring are necessary, as cost-effectiveness depends on characteristics of the system of care. Expansion of successful programmes to achieve widespread use remains a critical challenge. Copyright 2003 John Wiley & Sons, Ltd. [References: 41]

#### Ref ID: 436

### Zavaroni, C. (2001). Home care and short-run nursing homes: organizational aspects of their integration with oncological organizations. [Review] [56 refs]. Critical Reviews in Oncology-Hematology, 39, 247-267.

Abstract: Social-health care to oncological elderly patients implies interconnection among oncological hospital and subdistrict services and acknowledgement of a sole access channel. The project requires the formation of an interadministrative coordination group and of functional transmural units with evaluational and operative roles. Various care levels (protected hospital admission and discharge, continuity visits, evaluational-therapeutic integration during treatment, palliative cures) implicate specific criterion of eligibility and actions to rationalize organization, coordination and distribution of interventions. Efficiency and effectiveness depend on integration with the services that supply material and with the diagnostic and ambulatory ones. The mid-term prospectives of the integration regard computerization of diagnostic, therapeutic, care and rehabilitation courses of patients (Regional Computerized Register of Disability) and formation of polyfunctional centres that concern home, residential and hospital intervention. Powerful technological instruments and the new organizational forms now available should encourage the formation of a morally upright society. [References: 56]

## Thompson, L. G. (109). Clear goals, solid evidence, integrated systems, realistic roles. [Review] [30 refs]. Healthcarepapers, 1, 60-66.

Abstract: To maximize the effectiveness of home care in improving or maintaining the health of Canadians, home-care programs must have clear goals, be founded firmly on evidence of effectiveness, form part of an integrated healthcare system and be grounded in constitutional and political reality. Goals should be client-centred and distinguish between curative, supportive and preventive care. Curative and supportive home care can be cost-effective if substitution for more costly institutional services can be achieved, but the cost-effectiveness of preventive home care and comprehensive care for the elderly has not been clearly demonstrated. Integrated delivery systems are a prerequisite for effective substitution of care at home for institutional care. Federal financing dedicated to a home-care program is unnecessary and is a political and constitutional non-starter. Federal leadership for a national home-care approach would be welcome. Canada Health Act protection for access to medically necessary home care is attractive, but such protection for pharmaceuticals is a higher need. Federal support for research and demonstration of new models of care is valuable. [References: 30]

#### Ref ID: 534

Australian and New Zealand society for geriatric medicine: Position statement No. 14 guidelines for the management of older persons presenting to emergency departments 2008 (2009). Australasian Journal on Ageing, 28, 153-157. Abstract: With Australias ageing population, EDs will assume an increasingly important role in the practice of geriatric medicine both in the acute ospital and community setting. Models of care for other special-needs patient groups have been established widely in ED. Successful and established examples such as paediatric emergency centres, trauma centres, trauma teams, acute stroke teams and fast track acute coronary syndrome units provide efficient, effective, comprehensive and standardised care to their patients. Novel and innovative models of care addressing the specialist needs of older people are needed to improve the outcomes of older patients in ED. A more comprehensive and integrated model of emergency care for older people is required, linking primary care and improving exchange of information. Aged care services should consider an increased role in the ED as an important priority and opportunity to favourably influence the care of older people in coming years. Continued collaboration, communication and education between the ED and geriatric medicine are paramount to develop an agenda for ongoing research, evidence-based policy and standard practice in the field of geriatric emergency medicine. 2009 ACOTA

#### Ref ID: 546

# Huang, C.-Q., Dong, B.-R., Lu, Z.-C., Zhang, Y., Pu, Y.-S., & Liu, Q.-X. (2009). Collaborative care interventions for depression in the elderly: A systematic review of randomized controlled trials. Journal of Investigative Medicine, 57, 446-455.

Abstract: Objective: To determine the effective components and the feasibility of collaborative care interventions (CCIs) in the treatment of depression in older patients. Methods: Systematic review of randomized controlled trials, in which CCIs were used to manage depression in patients aged 60 or older. Results: We identified 3 randomized controlled trials involving 3930 participants, 2757 of whom received CCIs and the others received usual care. Collaborative care interventions were more effective in improving depression symptoms than usual care during each follow-up period. Compared with baseline, thoughts of suicide in subjects receiving CCIs significantly decreased (odds Ratio [OR], 0.52; 95% confidence intervals [CI], 0.35-0.77), but not that in those receiving usual care (OR, 0.85; 95% CI, 0.50-1.43). Subjects receiving CCIs were significantly more likely to report depression treatment (including any antidepressant medication and psychotherapy) than those receiving usual care during each follow-up period. Collaborative care interventions significantly increased depression-free days, but did not significantly increase outpatient cost. At 6 and 12 months postintervention, compared with those receiving usual care, participants receiving CCIs had lower levels of depression symptoms and thoughts of suicide. Moreover, participants receiving CCIs were significantly more likely to report antidepressant medication treatment, but were not significantly more likely to report psychotherapy. Collaborative care interventions with communication between primary care providers and mental health providers were no more effective in improving depression symptoms than CCIs without such communication. Conclusions: Collaborative care interventions are more effective for depression in older people than usual care and are also of high value. Antidepressant medication is a definitely effective component of CCIs, but communication between primary care providers and mental health providers seems not to be an effective component of CCIs. The effect of psychotherapy in CCIs should be further explored. Copyright 2009 by The American Federation for Medical Research

# Tieman, J., Mitchell, G., Shelby-James, T., Currow, D., Fazekas, B., O'Doherty, L. et al. (2007). Integration, coordination and multidisciplinary care: What can these approaches offer to Australian primary health care? Australian Journal of Primary Health, 13, 56-65.

Abstract: Australia's population is ageing and the consequential burden of chronic disease increasingly challenges the health system. This has raised interest in, and awareness of approaches built on multidisciplinary teams and integrated and coordinated care in managing the complex care needs of patient groups such as the chronically ill or frail aged. A systematic investigation of the literature relating to these approaches provided the opportunity to explore the meaning of these terms and their potential application and relevance to the Australian primary health care setting. Five systematic reviews of a sentinel condition and an exemplar approach to coordinated and multidisciplinary care were completed. Common learnings from the individual reviews were identified. The literature suggests that approaches encouraging a coordinated and multidisciplinary plan of care for individual patients and/or particular populations may improve a variety of outcomes. There are many methodological considerations in conducting reviews of complex interventions and in assessing their applicability to the Australian health system

#### Ref ID: 580

## Vannoy, S., Powers, D., & Unutzer, J. (2007). Models of care for treating late-life depression in primary care. Aging Health, 3, 67-75.

Abstract: The aim of this review is to highlight the need for treating late-life depression in primary care settings, review obstacles to doing so and introduce evidence-based models of depression care for older primary care patients. While Interventions focusing on depression screening, provider education and referral to mental health specialists have had only limited success, several recent trials have demonstrated that programs in which primary care providers and mental health professionals effectively collaborate to treat depression using evidence-based treatment algorithms are more effective than usual care. Future research should address the problem of persistent depression, which has been identified in recent collaborative care studies, and focus on how to translate evidence-based approaches for late-life depression treatment into real world practice. 2007 Future Medicine Ltd

#### Ref ID: 605

### Oxman, T. E., Dietrich, A. J., & Schulberg, H. C. (2005). Evidence-based models of integrated management of depression in primary care. Psychiatric Clinics of North America, 28, 1061-1077.

Abstract: The majority of primary care clinicians accept the responsibility of treating depression across patients' life span, and mental health specialists must respect and foster this responsibility. Primary care clinicians are ready to entertain more organized monitoring, follow-up, and collaboration with mental health specialists, as long as the issues of care complexity, role clarification, and costs can be resolved. Disseminating the concepts and tools of systems of depression management to primary care practices while simultaneously addressing policy implications at the level of payers and regulators holds considerable promise for translating evidence-based research into improved care for the large numbers of depressed patients in primary care. 2005 Elsevier Inc. All rights reserved

#### Ref ID: 617

#### Lynch, M., Estes, C. L., & Hernandez, M. (2005). Chronic care initiatives for the elderly: Can they bridge the gerontologymedicine gap? Journal of Applied Gerontology, 24, 108-124.

Abstract: The authors describe initiatives designed to meet the chronic health needs of the elderly. These programs include demonstration programs such as Program of All-Inclusive Care for Elderly, Social Health Maintenance Organization, and state programs for Medicare-Medicaid-eligible elders that focus on integrating medical care with home and community-based services, disease-or disability-focused care management/coordination initiatives, and recent population-based disease management programs focused on improving adherence to evidence-based protocols, self-care management, and the use of innovative practices such as group visits to improve health outcomes. These initiatives have the potential to improve outcomes and reduce costs, but also highlight tensions between medical model disease management and functionally oriented home and community service programs. The authors suggest that optimal chronic care for elders would require the integration of advances in medically oriented disease management with the best of home and community-based service programs. Medicare policy should promote such integration. 2005 The Southern Gerontological Society

### Harpole, L. H., Williams, J., & J.W. (2004). Assessment and management of depression in older adults. Primary Psychiatry, 11, 31-36.

Abstract: Approximately 5% to 10% of older patients who visit a primary care provider suffer from clinically significant depression. Making the diagnosis in the older population can be challenging, as the cardinal symptom of depression, depressed mood, is less prominent than symptoms such as loss of interest and enjoyment in life, anergia, sleeplessness, and loss of appetite. Significant barriers to successful treatment exist in this population, including patient resistance to accepting the diagnosis and its perceived stigma, the inappropriate attribution of depressive symptoms to natural aging, and the primary care physician @ lack of time and resources to provide adequate treatment. Primary care physicians should make special efforts to screen for depression in their older patients, and once identified, provide education and close follow-up, with the goal of achieving remission from depressive symptoms. Collaborative care models, incorporating patient education, case management, and liaison mental health care, which were developed to overcome some of the barriers to successful treatment of depression in older adults, have proven to be successful. Elements of these models can be incorporated into current practice with the goal of improving the quality of depression care in older adults

#### Ref ID: 634

## Speer, D. C. & Schneider, M. G. (2003). Mental health needs of older adults and primary care: Opportunity for interdisciplinary geriatric team practice. Clinical Psychology: Science and Practice, 10, 85-101.

Abstract: The convergence of a number of disparate factors has led to opportunities to help address the mental health needs of older adults in primary care (PC) or "integrated care" settings. Older adults are disproportionately high users of health care resources, and cost projections for coming decades have catastrophic implications. Elders shun mental health services, instead turning to their personal physicians when troubled. The PC system is clogged with patients without medical problems or whose medical conditions are exacerbated by psychosocial factors (estimated at 60% to 70%), resulting in overutilization of services and high costs. However, PC physicians detect and adequately treat or refer only 40% to 50% of patients with mental health problems. Early experience with brief and/or structured interventions in PC settings is promising and suggests opportunities for multidisciplinary team geriatric practice. 2003 American Psychological Association D12

#### Ref ID: 636

Lauderdale, S. A. & Sheikh, J. I. (2003). Anxiety disorders in older adults. Clinics in Geriatric Medicine, 19, 721-741.

Abstract: Recent epidemiologic surveys indicate that anxiety disorders in older adults are more common than previously believed. Despite this, knowledge regarding the clinical characteristics of anxiety disorders in elderly patients is emerging slowly. In addition, detection of anxiety symptoms in elders is complicated by several factors, including a confounding of symptom picture by high medical comorbidity, frequent use of multiple prescribed and over-the-counter medications, difficulty of differentiating anxiety from depression, and a tendency of some older adults to resist psychiatric evaluation. Nonetheless, a comprehensive evaluation that includes a clinical interview, self-report measures, and laboratory results, can improve detection and accurate assessment of anxiety in elderly patients. Empirically validated knowledge regarding appropriate pharmacologic interventions in elderly patients is still sparse, and inferences from data in young and middle-aged populations typically form the basis of clinical practice in elderly patients. SSRIs and SNRIs are considered first-line interventions because of their efficacy and relative tolerability in elderly patients. Psychotherapy, particularly cognitive-behavioral therapy, also has been found to be efficacious for older adults with anxiety disorders. Collaborative care models that address physician, patient, and healthcare service delivery barriers, also hold promise for adequately treating anxiety disorders experienced by older adults

#### Ref ID: 642

### Oxman, T. E., Dietrich, A. J., & Schulberg, H. C. (2003). The depression care manager and mental health specialist as collaborators within primary care. American Journal of Geriatric Psychiatry, 11, 507-516.

Abstract: Objective: The authors reviewed the implications of the latest generation of health services research studies on primary care practice system changes for depression management, especially in the roles of care managers and mental health specialists. Methods: Authors conducted a review of four large, related, multisite trials testing system changes in the delivery of care to depressed, mostly older, primary care patients. Results: These studies confirm that older patients are more likely to accept collaborative mental health treatment within primary care than within mental health specialty care. The study results published to date suggest that these system changes produce better outcomes than usual care for

depression in a wide range of patients and healthcare organizations. Two key partners in implementing these system changes are a care manager to assist the primary care physician in patient education, treatment, and treatment monitoring, and a mental health specialist to provide care-manager consultation and collaborative care with the primary care physician for more complex cases. Conclusions: Most patients with depression first seek attention for their symptoms in primary care, rather than in the mental health specialty sector. Since primary care visits are necessarily brief and pressured by competing demands to manage other medical problems, practice system changes are necessary. For mental health specialists, these studies emphasize the importance of joining and being integrated into primary care. Consultative and supervisory roles allow the specialist to indirectly but effectively serve a larger number of patients

#### Ref ID: 652

Bartels, S. J. (2002). Quality, costs, and effectiveness of services for older adults with mental disorders: A selective overview of recent advances in geriatric mental health services research. Current Opinion in Psychiatry, 15, 411-416. Abstract: Purpose of review: The projected increase in the number of older individuals with mental disorders underscores the need to identify optimal models of organizing, delivering, and financing geriatric mental health services. Recent work has provided insight into key areas, including the quality and costs of services for older individuals with mental disorders. This paper provides a brief overview of selected studies (published in 2001) addressing a variety of important topics, including the quality of care, mental health treatment in primary care, the costs of treating dementia, and an agenda to advance geriatric mental health services research. Recent findings: Older adults with mental disorders are at increased risk of receiving inadequate or inappropriate care, including a lower quality of healthcare, inappropriate prescriptions, and cost-containment strategies resulting in diminished access to adequate treatment. Models of service delivery that integrate mental health and primary care are being studied, with the expectation of increasing access, improving outcomes, and efficiently managing healthcare costs. However, the costs of formal, paid services are only part of the story. Most of the costs of Alzheimer's disease are associated with the cost of informal family caregivers, underscoring the need for effective support services aimed at this group. Summary: Recent health services research documented a poor quality of care for many older individuals with mental disorders, and substantial costs associated with formal and informal care. A future agenda for geriatric mental health services research is described, including the need to address the shortfall in trained geriatric mental health services researchers and supported research. 2002 Lippincott Williams & Wilkins

#### Ref ID: 658

### Beaulieu, J., Rowles, G. D., & Kuder, L. C. (2001). Current research in rural models of integrated long-term care. Journal of Applied Gerontology, 20, 379-385.

Abstract: This introductory article describes four commissioned articles in this issue that review the research on integrated models of long-term care and the rural implications of these models. Most models have been tested in urban areas or with urban population bases. Rural regions have both barriers and opportunities in implementing integrated long-term care. Although a full range of long-term care services may be failing to meet the needs of home and community-based care, rural areas may have better cooperation among acute and long-term care providers. Managed care penetration and experience are limited in most rural regions, but examples are given of Program for All-Inclusive Care of the Elderly programs, the Arizona long-term care system, the Carle Clinic demonstration, and developments in several states for serving rural long-term care populations with new models that integrate across providers, funders, and/or services

#### Ref ID: 660

### Hardey, M., Payne, S., Powell, J., Hawker, S., & Kerr, C. (2001). Professional territories and the fragmented landscape of elderly care. Journal of The Royal Society for the Promotion of Health, 121, 159-164.

Abstract: This paper examines the problems and dilemmas involved in delivering care to older people. In particular it seeks to identify the processes that facilitate or hinder communication and collaboration between those involved in care that has to be both reliable and expeditious to ensure that high quality care is provided. To do this the paper draws on a recent international systematic review of the relevant research literature which is briefly described. A geographical analogy is employed to help map different organisational and professional territories of care. It will be argued that these territories have their own priorities, patterns of working and perceptions of older people. The paper concludes by considering a potential way to merge territorial interests by reconfiguring the map of care around the older person

# Handoll Helen, H. G., Cameron, I. D., Mak Jenson, C. S., & Finnegan, T. P. (2009). Multidisciplinary rehabilitation for older people with hip fractures [Cochrane review]. In Cochrane Database of Systematic Reviews 2009 Issue 4 (Chichester (UK): John Wiley & Sons, Ltd.

Abstract: BACKGROUND: Hip fracture is a major cause of morbidity and mortality in older people and its impact on society is substantial. OBJECTIVES: To examine the effects of multidisciplinary rehabilitation, in either inpatient or ambulatory care settings, for older patients with hip fracture. SEARCH STRATEGY: We searched the Cochrane Bone, Joint and Muscle Trauma Group Specialised Register (April 2009), The Cochrane Library (2009, Issue 2), MEDLINE and EMBASE (both to April 2009). SELECTION CRITERIA: Randomised and quasi-randomised trials of post-surgical care using multidisciplinary rehabilitation of older patients (aged 65 years or over) with hip fracture. The primary outcome, 'poor outcome' was a composite of mortality and decline in residential status at long-term (generally one year) follow-up. DATA COLLECTION AND ANALYSIS: Trial selection was by consensus. Two review authors independently assessed trial quality and extracted data. Data were pooled where appropriate. MAIN RESULTS: The 13 included trials involved 2498 older, usually female, patients who had undergone hip fracture surgery. Though generally well conducted, some trials were at risk of bias such as from imbalances in key baseline characteristics. There was substantial clinical heterogeneity in the trial interventions and populations. Multidisciplinary rehabilitation was provided primarily in an inpatient setting in 11 trials. Pooled results showed no statistically significant difference between intervention and control groups for poor outcome (risk ratio 0.89; 95% confidence interval 0.78 to 1.01), mortality (risk ratio 0.90, 95% confidence interval 0.76 to 1.07) or hospital readmission. Individual trials found better results, often short-term only, in the intervention group for activities of daily living and mobility. There was considerable heterogeneity in length of stay and cost data. Three trials reporting carer burden showed no evidence of detrimental effect from the intervention. Overall, the evidence indicates that multidisciplinary rehabilitation is not harmful. The trial comparing primarily home-based multidisciplinary rehabilitation with usual inpatient care found marginally improved function and a clinically significantly lower burden for carers in the intervention group. Participants of this group had shorter hospital stays, but longer periods of rehabilitation. One trial found no significant effect from doubling the number of weekly contacts at the patient's home from a multidisciplinary rehabilitation team. AUTHORS' CONCLUSIONS: While there was a tendency to a better overall result in patients receiving multidisciplinary inpatient rehabilitation, these results were not statistically significant. Future trials of multidisciplinary rehabilitation should aim to establish both effectiveness and cost effectiveness of multidisciplinary rehabilitation overall, rather than evaluate its components. MULTIDISCIPLINARY REHABILITATION OF OLDER PATIENTS WITH HIP FRACTURES: Hip fracture is a serious injury in older people and can contribute to their death or loss of independence. Normally surgery is performed and followed by care in a ward under the supervision of orthopaedic staff. Additional rehabilitation within the hospital is sometimes provided by a geriatrician and other health professionals. Sometimes, the emphasis is on early discharge from hospital with multidisciplinary rehabilitation provided to the patient at home. There is enormous variety in these rehabilitation programmes. This review included 13 trials, which involved a total of 2498 older, usually female, patients who had undergone surgery for hip fracture. Generally the trials appeared well conducted, although some were at risk of bias that could affect the reliability of their results. For example, despite randomisation, in five trials there were some important differences in patient characteristics, such as age, at the start of the trial that could have influenced trial findings. The trial interventions were very varied but all compared multidisciplinary rehabilitation with usual care. In 11 trials, care was provided either totally or mainly in an inpatient or hospital setting. While there was a tendency for a better outcome after multidisciplinary rehabilitation, the results were not statistically significant and thus cannot be considered conclusive. However, the overall evidence indicates that multidisciplinary rehabilitation is not harmful. Additionally, there was some inconclusive evidence that multidisciplinary rehabilitation did not add to the burden of carers. In one trial that compared home-based multidisciplinary rehabilitation with usual inpatient care, carers reported significantly lower burden in the long term after multidisciplinary rehabilitation. Participants in the home-based rehabilitation group of this trial had shorter hospital stays, but longer periods of rehabilitation. One other trial found no significant effect from doubling the number of weekly contacts at the patient's home by a multidisciplinary rehabilitation team. Overall, the results of this review suggest that multidisciplinary rehabilitation may help more older people recover after a hip fracture. However, the results are not conclusive and more research is needed

#### Ref ID: 673

Smith, S. M., Allwright, S., & O'Dowd, T. (2007). Effectiveness of shared care across the interface between primary and specialty care in chronic disease management [Cochrane review]. In Cochrane Database of Systematic Reviews 2007 Issue 3 (Chichester (UK): John Wiley & Sons, Ltd.

Abstract: BACKGROUND: Shared care has been used in the management of many chronic conditions with the assumption that it delivers better care than either primary or specialty care alone. It has been defined as the joint participation of primary care physicians and specialty care physicians in the planned delivery of care, informed by an enhanced information exchange over and above routine discharge and referral notices. It has the potential to offer improved quality and coordination of care delivery across the primary-specialty care interface and to improve outcomes for patients. OBJECTIVES: To determine the effectiveness of shared-care health service interventions designed to improve the management of chronic disease across the primary-specialty care interface. SEARCH STRATEGY: We searched the Cochrane Effective Practice and Organisation of Care Group (EPOC) Specialised Register (and the database of studies awaiting assessment); Cochrane Central Register of Controlled Trials (CENTRAL); Database of Abstracts of Reviews of Effects (DARE); MEDLINE (from 1966); EMBASE (from 1980) and CINAHL (from 1982). We also searched the reference lists of included studies. SELECTION CRITERIA: Randomised controlled trials, controlled before and after studies and interrupted time series analyses of shared-care interventions for chronic disease management. The participants were primary care providers, specialty care providers and patients. The outcomes included physical health outcomes, mental health outcomes, and psychosocial health outcomes, treatment satisfaction, measures of care delivery including participation in services, delivery of care and prescribing of appropriate medications, and costs of shared care. DATA COLLECTION AND ANALYSIS: Three review authors independently assessed studies for eligibility, extracted data and assessed study quality. MAIN RESULTS: Twenty studies of shared care interventions for chronic disease management were identified, 19 of which were randomised controlled trials. The majority of studies examined complex multifaceted interventions and were of relatively short duration. The results were mixed. Overall there were no consistent improvements in physical or mental health outcomes, psychosocial outcomes, psychosocial measures including measures of disability and functioning, hospital admissions, default or participation rates, recording of risk factors and satisfaction with treatment. However, there were clear improvements in prescribing in the studies that considered this outcome. The methodological quality of studies varied considerably with only a minority of studies of high-quality design. Cost data were limited and difficult to interpret across studies. AUTHORS' CONCLUSIONS: This review indicates that there is, at present, insufficient evidence to demonstrate significant benefits from shared care apart from improved prescribing. Methodological shortcomings, particularly inadequate length of follow-up, may partially account for this lack of evidence. This review indicates that there is no evidence to support the widespread introduction of shared care services at present. Future shared-care interventions should only be developed within research settings and with account taken of the complexity of such interventions and the need to carry out longer studies to test the effectiveness and sustainability of shared care over time. EFFECTIVENESS OF SHARED CARE ACROSS THE INTERFACE BETWEEN PRIMARY AND SPECIALTY CARE IN CHRONIC DISEASE MANAGEMENT: Shared care across the primary-specialty interface has been defined as the joint participation of primary care physicians and specialty care physicians in the planned delivery of care, informed by an enhanced information exchange, over and above routine discharge and referral notices. As such it has the potential to improve the management of chronic diseases and lead to better outcomes than either primary or specialty care on their own. This review examines the effectiveness of shared care for a range of chronic conditions in a variety of healthcare settings. Shared care interventions identified were complex and multifaceted. Results were varied and many of the studies were of poor quality. Shared care had a clear effect on improving prescribing but the pattern of results was mixed for all other outcomes. There is a need to improve the design and quality of studies examining such interventions in order to determine which components, if any, are effective, to assess issues such as sustainability of shared care and to determine settings and patient groups in which shared care may be most effective

#### Ref ID: 674

# Britton, A. M. & Russell, R. (2006). Multidisciplinary team interventions for delirium in patients with chronic cognitive impairment [Cochrane review]. In Cochrane Database of Systematic Reviews 2006 Issue 2 ( Chichester (UK): John Wiley & Sons, Ltd.

Abstract: BACKGROUND: Delirium is common in hospitalized elderly people. Delirium may affect 60% of frail elderly people in hospital. Among the cognitively impaired, 45% have been found to develop delirium and these patients have longer lengths of hospital stay and a higher rate of complications which, with other factors, increase costs of care. The management of delirium has commonly been multifaceted, the primary emphasis has to be on the diagnosis and therapy of precipitating factors, but as these may not be immediately resolved, symptomatic and supportive care are also of major importance. OBJECTIVES: The objective of this review is to assess the available evidence for the effectiveness, if any, of multidisciplinary team interventions in the coordinated care of elderly patients with delirium superimposed on an underlying chronic cognitive impairment in comparison with usual care. SEARCH STRATEGY: The trials were identified

from a last updated search of the Specialized Register of the Cochrane Dementia and Cognitive Improvement Group on 3 July 2003 using the terms delirium and confus\*. The Register is regularly updated and contains records of all major health care databases and many ongoing trial databases. SELECTION CRITERIA: Selection for possible inclusion in this review was made on the basis of the research methodology - controlled trials whose participants are reported as having chronic cognitive impairment, and who then developed incident delirium and were randomly assigned to either coordinated multidisciplinary care or usual care. DATA COLLECTION AND ANALYSIS: Nine controlled trials were identified for possible inclusion in the review, only one of which met the inclusion criteria. At present the data from that study cannot be analysed. We have requested additional data from the authors and are awaiting their reply. MAIN RESULTS: No studies focused on patients with prior cognitive impairment, so management of delirium in this group could not be assessed. There is very little information on the management of delirium in the literature despite an increasing body of information about the incidence, risks and prognosis of the disorder in the elderly population. AUTHORS' CONCLUSIONS: The management of delirium needs to be studied in a more clearly defined way before evidence-based guidelines can be developed.Insufficient data are available for the development of evidence-based guidelines on diagnosis or management. There is scope for research in all areas - from basic pathophysiology and epidemiology to prevention and management. Though much recent research has focused on the problem of delirium, the evidence is still difficult to utilize in management programmes. Research needs to be undertaken targeting specific groups known to be at high risk of developing delirium, for example the cognitively impaired and the frail elderly. As has been highlighted by Inouye 1999, delirium has very important economic and health policy implications and is a clinical problem that can affect all aspects of care of an ill older person. Delirium, though a frequent problem in hospitalized elderly patients, is still managed empirically and there is no evidence in the literature to support change to current practice at this time. NO EVIDENCE FOR EFFECTIVENESS OF MULTIDISCIPLINARY TEAM INTERVENTIONS FOR DELIRIUM IN PATIENTS WITH CHRONIC COGNITIVE IMPAIRMENT: The combination of being elderly and chronically cognitively impaired leads to a high risk of delirium with the associated increased risk of prolonged hospital stay, complications, and poor outcomes. The review aims to assess the effectiveness of interventions by multidisciplinary teams in the coordinated care of elderly patients with delirium superimposed on an underlying chronic cognitive impairment, compared with the usual care of older cognitively impaired patients. There are however to date no studies of the management of delirium in patients known to be cognitively impaired prior to the episode of delirium

#### Ref ID: 689

# Gruen, R. L., Weeramanthri, T. S., Knight Stephen, S. E., & Bailie, R. S. (2003). Specialist outreach clinics in primary care and rural hospital settings [Cochrane review]. In Cochrane Database of Systematic Reviews 2003 Issue 4 (Chichester (UK): John Wiley & Sons, Ltd.

Abstract: BACKGROUND: Specialist medical practitioners have conducted clinics in primary care and rural hospital settings for a variety of reasons in many different countries. Such clinics have been regarded as an important policy option for increasing the accessibility and effectiveness of specialist services and their integration with primary care services. OBJECTIVES: To undertake a descriptive overview of studies of specialist outreach clinics and to assess the effectiveness of specialist outreach clinics on access, guality, health outcomes, patient satisfaction, use of services, and costs. SEARCH STRATEGY: We searched the Cochrane Effective Practice and Organisation of Care (EPOC) specialised register (March 2002), the Cochrane Controlled Trials Register (CCTR) (Cochrane Library Issue 1, 2002), MEDLINE (including HealthStar) (1966 to May 2002), EMBASE (1988 to March 2002), CINAHL (1982 to March 2002), the Primary-Secondary Care Database previously maintained by the Centre for Primary Care Research in the Department of General Practice at the University of Manchester, a collection of studies from the UK collated in "Specialist Outreach Clinics in General Practice" (Roland 1998), and the reference lists of all retrieved articles. SELECTION CRITERIA: Randomised trials, controlled before and after studies and interrupted time series analyses of visiting specialist outreach clinics in primary care or rural hospital settings, either providing simple consultations or as part of complex multifaceted interventions. The participants were patients, specialists, and primary care providers. The outcomes included objective measures of access, quality, health outcomes, satisfaction, service use, and cost. DATA COLLECTION AND ANALYSIS: Four reviewers working in pairs independently extracted data and assessed study quality. MAIN RESULTS: 73 outreach interventions were identified covering many specialties, countries and settings. Nine studies met the inclusion criteria. Most comparative studies came from urban non-disadvantaged populations in developed countries. Simple 'shifted outpatients' styles of specialist outreach were shown to improve access, but there was no evidence of impact on health outcomes. Specialist outreach as part of more complex multifaceted interventions involving collaboration with primary care, education or other services wasassociated with improved health outcomes, more efficient and guideline-consistent care, and less use of inpatient services. The

additional costs of outreach may be balanced by improved health outcomes. AUTHORS' CONCLUSIONS: This review supports the hypothesis that specialist outreach can improve access, outcomes and service use, especially when delivered as part of a multifaceted intervention. The benefits of simple outreach models in urban non-disadvantaged settings seem small. There is a need for good comparative studies of outreach in rural and disadvantaged settings where outreach may confer most benefit to access and health outcomes. SPECIALIST OUTREACH CLINICS IN PRIMARY CARE AND RURAL HOSPITAL SETTINGS MAY IMPROVE ACCESS TO CARE, QUALITY OF CARE, HEALTH OUTCOMES, PATIENT SATISFACTION AND USE OF HOSPITAL SERVICES. THEY MAY ALSO BE MORE COSTLY.: This review examines the benefits and costs of outreach in a range of specialties and in a variety of settings. Simple 'shifted outpatients' styles of specialist outreach were shown to improve access, but there was no evidence of their impact on health outcomes. Outreach as part of more complex multifaceted interventions involving primary care collaborations, education and other services was associated with improved health outcomes, more efficient and guideline-consistent care, and less use of inpatient services. There is a need for better quality evidence evaluating specialist outreach in all settings, but especially in rural and disadvantaged populations

#### Ref ID: 704

Day, P. & Rasmussen, P. (2004). What is the evidence for the effectiveness of specialist geriatric services in acute, postacute and sub-acute settings? A critical appraisal of the literature (Structured abstract). Christchurch: New Zealand Health Technology Assessment (NZHTA), 149. 4. References of potentially relevant reports which were unavailable electronically (abstracts included, n=23)

#### RefID: 95

# Vedel I, De SM, Bergman H, Ankri J, Cassou B, Mauriat C, Blanchard F, Bagaragaza E, Lapointe L. A novel model of integrated care for the elderly: COPA, Coordination of Professional Care for the Elderly. Aging Clin Exp Res 2009; 21(6):414-423

Abstract: Despite strong evidence for the efficacy of integrated systems, securing the participation of health professionals, particularly primary care physicians (PCPs), has proven difficult. Novel approaches are needed to resolve these problems. We developed a model - COPA - that is based on scientific evidence and an original design process in which health professionals, including PCPs, and managers participated actively. COPA targets very frail community-dwelling elders recruited through their PCP. It was designed to provide a better fit between the services provided and the needs of the elderly in order to reduce excess healthcare use, including unnecessary emergency room (ER) visits and hospitalizations, and prevent inappropriate long-term nursing home placements. The model's originality lies in: 1) having reinforced the role played by the PCP, which includes patient recruitment and care plan development; 2) having integrated health professionals into a multidisciplinary primary care team that includes case managers who collaborate closely with the PCP to perform a geriatric assessment (InterRAI MDS-HC) and implement care management programs; and 3) having integrated primary medical care and specialized care by introducing geriatricians into the community to see patients in their homes and organize direct hospitalizations while maintaining the PCP responsibility for medical decisions. Since COPA is currently the subject of both a quasi-experimental study and a qualitative study, we are also providing preliminary findings. These findings suggest that the model is feasible and well accepted by PCPs and patients. Moreover, our results indicate that the level of service utilization in COPA was less than what is reported at the national level, without any compromises in quality of care

#### RefID: 146

Famadas JC, Frick KD, Haydar ZR, Nicewander D, Ballard D, Boult C. The effects of interdisciplinary outpatient geriatrics on the use, costs and quality of health services in the fee-for-service environment. Aging Clin Exp Res 2008; 20(6):556-561

Abstract: BACKGROUND AND AIMS: To evaluate the effect of interdisciplinary outpatient geriatrics on the use, cost, and quality of health services in a fee-for-service (FFS) environment of two networks of primary care clinics operated by a not-for-profit provider organization in Dallas County, Texas. METHODS: The Senior Health Network (SHN) provides interdisciplinary primary care to patients aged 55 years or older; the Health Texas Provider Network (HTPN) provides "usual" primary care to patients of all ages. We conducted a two-year retrospective cohort study of 13,098 fee-for-service Medicare beneficiaries who had 2+ visits to one of the networks in 2000. In the SHN, interdisciplinary teams supplemented primary care with social services, specialized clinics, and health education. We compared the use, cost and quality of health services, as reflected by paid Medicare claims, provided to eligible patients in the SHN vs the HTPN. RESULTS: Medicare payments for hospital, skilled nursing facility, and home health care services were lower for SHN patients than HTPN patients (-32.7%, -19.8%, and -23.8%, respectively, p<orellos). SHN patients had a lower likelihood of admission to hospitals for treatment of five "ambulatory care sensitive conditions" (aOR 0.69, 95% CI 0.58- 0.81), and they were less likely to receive several preventive services. Total Medicare payments for the two cohorts did not differ significantly. CONCLUSIONS: Interdisciplinary outpatient geriatric care in a FFS setting has the potential to avert hospital admissions for ambulatory care sensitive conditions and to reduce Medicare payments for hospital, skilled nursing facility, and home health care services.

#### RefID: 205

# Manthorpe J, Clough R, Cornes M, Bright L, Moriarty J, Iliffe S, OPRSI (Older People Researching Social Issues). Four years on: the impact of the National Service Framework for Older People on the experiences, expectations and views of older people. Age Ageing 2007; 36(5):501-507

Abstract: AIM: Evaluation of the impact of the National Service Framework for Older People (NSFOP) on the experiences and expectations of older people, 4 years into its 10 year programme. BACKGROUND: the NSFOP is a comprehensive strategy designed to promote fair, high quality, integrated health and social care services for older people in England. It emphasises (i) the need for services to support independence and promote health, (ii) the specialisation of services for key conditions (stroke, falls and mental illness) and (iii) advocates a cultural change in services so that the older people and their carers are treated with respect, dignity and fairness. It has a 10-year timetable for implementation, starting in 2001. METHOD: A mixed methods approach to evaluation was taken in ten purposively selected localities in England. A portfolio of methods (listening events, nominal groups and interviews) was used with older people and carers to focus on processes as well as on outcomes and to allow for the possibility of conflicting or differing judgements about service quality. FINDINGS: One thousand eight hundred and thirty-nine people participated in public listening events, 1,639 took part in nominal groups and 120 were interviewed individually. The existence of the NSFOP was not widely known beyond the NSFOP local implementation teams and voluntary sector activists. Many, but not all older people, identified themselves as members of a group that was subject to age prejudice that altered the quality and standard of their care. This identity included a role as carer for others, but there was less emphasis on the rights of older people. Positive changes in primary care services were offset by difficulties in accessing general practice and a sense that services were becoming impersonal. The quality of social care at home varied from sensitive and personal to fragmentary, hurried and impersonal. Hospitals treatment was perceived as improved in speed and quality in most places, but hospitals were also seen as risky and insufficiently caring, with discharge sometimes being unprepared, over-zealous and disorganised. CONCLUSIONS: If asked, older people do not perceive improvements as the result of a NSFOP, but nonetheless they do perceive improvements in systems. It is difficult to attribute any of the changes in experiences that we identified to the NSFOP itself, but we can see that other change processes run contrary to some aspects of the NSFOP whilst some trends are congruent with the aspirations of the NSFOP. Government initiatives face the difficulty of distinguishing experiences that may be attributable to multiple causes. They are influenced nonetheless by the outcome of public consultation since these provide relatively rapid means of feedback and commentary by citizens and regulators on the performance of services

#### RefID: 296

### Biein B. An older person as a subject of comprehensive geriatric approach. Rocz Akad Med Bialymst 2005; 50 Suppl 1:189-192

Abstract: The simultaneous presence of many disorders (physical, psychological, and social) and unmet health care needs in elderly people require a more complex assessment then just a routine diagnostic examination. The involvement of comprehensive geriatric assessment provides a health care model that integrates medical and nursing care with social support. A geriatric assessment could be carried out in a wide variety of settings including: acute hospital units, long-term care, out-patient dispensaries and home visits. A holistic and comprehensive geriatric approach should cover physical, functional and mental assessments as well as the caregiver's strain. For preventive care, effort should be placed on the aspect of health promotion, diseases prevention, and disability postponement. Rehabilitation is an important area for older people, as a majority of them requires a temporary rehabilitation after a major illness before they could regain independence in the community. In order to provide a cross comparison among different patients in different settings, a standardized methodology or instruments will enable to make comparisons better then subjective investigation. To provide a holistic and interdisciplinary health care for the elderly, training doctors, nurses and other health care professionals in geriatrics and gerontology is essential

#### **RefID: 358**

Dyer CB, Hyer K, Feldt KS, Lindemann DA, Busby-Whitehead J, Greenberg S, Kennedy RD, Flaherty E. Frail older patient care by interdisciplinary teams: a primer for generalists. [Review] [17 refs]. Gerontol Geriatr Educ 2003; 24(2):51-62 Abstract: Frail older patients-unlike younger persons in the health care system or even well elders-require complex care. Most frail older patients have multiple chronic illnesses. Optimum care cannot be achieved by following the paradigm of ongoing traditional health care, which emphasizes disease and cure. Because no one health care professional can possibly have all of the specialized skills required to implement such a model of health care delivery, interdisciplinary team care has evolved. This paper describes the roles of the participating team members in the context of interdisciplinary care for frail older adults. In addition, the challenges that occur when Geriatric Interdisciplinary (ID) Teams involved in providing care to frail older patients are identified and discussed. [References: 17]

#### RefID: 363

#### McCloughry H, Walker D, Sturdy L. A short step from home. Prof Nurse 2003; 19(2):68-69

Abstract: Short-term care packages that integrate hospital services and primary care not only cut unnecessary admissions but enable older patients to recover in a setting more conducive to their well-being

RefID: 374

Gong J, Greenwood R. PACE community care & more. Integrated care program offers opportunities for providers seeking alternatives. Provider 2003; 29(6):40-44

#### RefID: 388

**Brooks N. Intermediate care rapid assessment support service: an evaluation. Br J Community Nurs 628; 7(12):623-625** Abstract: This study evaluated a rapid assessment support service (RASS) in an inner city location. The evaluation focus was provided by the two main objectives of the service, i.e. to reduce the number of unnecessary emergency admissions for people over 65 years to acute hospitals and to support the assessment of people over 65 years in their own homes. A case study design was employed and methods included documentary analysis of patients' discharge summaries and/or notes, patient/carer diaries and patient/carer storytelling. The most common reasons for referral, and goals identified following assessment, were mobility/falls prevention and hygiene/activities of living. The key themes identified concerning the assessment process were partnership working, promoting patient independence relief for carers, integration of health and social care assessment, effective use of health-care professionals' time, integration with other services, satisfaction with the service and areas of dissatisfaction. Despite the methodological and practical limitations of this evaluation some of the early successes of this intermediate care service have been identified

#### RefID: 391

Chunharas S. The system of care for the elderly in Thailand: capitalizing from an integrated community-based health system through reform. [Review] [31 refs]. Aging Clin Exp Res 2002; 14(4):258-264

Abstract: Thailand is facing a dramatic challenge of how to ensure good health and quality of life for its rapidly increasing number of elderly citizens. The modern health services system established a century ago has a larger proportion of public providers, but only 35-40% share public spending on health. The health services administration, its infrastructure and health policies underwent a number of reforms resulting in a system that emphasizes community-based comprehensive health services with a multi-sectoral approach to health. There has been remarkable concern over the health and well-being of the elderly for the last two decades, leading to the introduction of specific policies and programs, both in health and social sectors. The health service infrastructure has better coverage compared to social services, with a varying degree of integration between the two depending partly on existing resources and management in each locality. Among many other social services, there are homes for the elderly and income support for the poor elderly. However, health services and institutions for the elderly are not being created separately, but rather by adding new services and programs to the existing comprehensive and integrated system of service delivery. The changing political and socio-economic environment provides a great opportunity to make the health and social services more responsive to the needs of the elderly, now and in the future. Decentralization and the universal health insurance policy of the new government with an emphasis on strong primary care providers will give a great push forward to the presently community-oriented nature of the extensive health service infrastructure. [References: 31]

#### RefID: 392

Bernabei R, Landi F, Zuccala G. Health care for older persons in Italy. Aging Clin Exp Res 2002; 14(4):247-251

Abstract: The aging of the population, with the ensuing rise in the number of older "clients" of the Health Agencies (15.2% people aged 0-14 vs 16% of those aged 64+ already in 1993), the new prospective payment system and a corporate philosophy were the driving forces that led the local Health Agencies to redesign the long-term care system, shifting resources from the hospital to the community. This shift constitutes a present challenge to the entire National Health Service. Furthermore, the Italian Health Service is also becoming decentralized, reflecting closely the political and administrative division of Italy into twenty regions. Regional authorities assign the available resources according to local needs and often interpret the central government's directives for controlling their health care budgets at their own discretion. As a result, profound interregional differences in health care expenditure occur which may aggravate the preexisting inequalities between the Italian regions. In the coming years, the main priorities to satisfy the needs of frail elderly people are the following: 1) to adapt the number of rehabilitation beds to the standard of 1 bed for 1000 inhabitants; 2) to guarantee in all Health Agencies the presence of Geriatric Evaluation Units in a position to: perform comprehensive geriatric assessment immediately upon request; design and implement individualized care plans in agreement with general practitioners; determine the services that patients are eligible for; and coordinate the delivery and facilitate the integration process between social and health care professionals; 3) to develop all possible alternatives to hospitalization, chiefly programs of integrated home health care or hospital at home; and 4) to realize the number of beds already funded in skilled nursing facilities (RSA) while decreasing acute beds to 4/1000

## Coleman EA. Challenges of systems of care for frail older persons: the United States of America experience. [Review] [29 refs]. Aging Clin Exp Res 2002; 14(4):233-238

Abstract: The concomitant demographic and economic imperatives of an increasingly aged and frail population in the United States provide a compelling rationale for the development of systems of care that provide greater integration and improved quality of care. After providing the supporting statistics that illuminate the challenges faced by this country, this article then examines the current organization and financing of services pertinent to the care of frail older adults. These individual services, however, comprise a continuum of care more by default than by design. Greater integration is needed to meet the needs of this population that requires care from different providers in multiple settings. Fortunately, innovations are being implemented that integrate acute care with chronic and long-term care, providing reason for hope that the health care system in the United States is responding to these imperatives. [References: 29]

#### RefID: 445

## Smyth C, Dubin S, Restrepo A, Nueva-Espana H, Capezuti E. Creating order out of chaos: models of GNP practice with hospitalized older adults. [Review] [31 refs]. Clin Excell Nurse Pract 2001; 5(2):88-95

Abstract: It has been well documented that hospitalization of an older adult can trigger a cascade of events that negatively affect quality of life long after hospitalization. Three models of care directed by hospital-based geriatric nurse practitioners (GNPs) are described. The GNPs' roles include primary care provider, consultant, educator, researcher, and/or administrator. In one model, the GNP collaborated with a multi-disciplinary team to create a clinical pathway, the Functional Recovery Pathway. In the second model, the GNP and nurse manager addressed the issue of fall risk with an education program for the staff. As a result, the fall rate decreased 5.8%. In a third model, the GNP coordinated care of hospitalized nursing home residents in a "scatter bed" program. Working synergistically with a case management program, the length of stay for this group of patients decreased from a median of 12 days to 9 days in the first year to 6.8 days in the third year. All three models showed that the GNP facilitate change, improve resource utilization, and create innovative strategies to optimize care for hospitalized elders. [References: 31]

#### RefID: 465

#### Powell D, Peile E. Joint working. It's a stitch-up. Health Serv J 2000; 110(5702):24-25

Abstract: A joint-working scheme aimed at keeping older people out of hospital with improved home support has reduced emergency admissions and cut the length of hospital stays. The initiative, involving four GP practices, a health authority, a community trust and social services department, included the appointment of a nurse co-ordinator and six support workers offering a 24-hour service. The scheme is now being extended by two primary care groups

#### RefID: 473

### Charalambakis D, Samiotakis Y, Sasson L. Computerised coordinated care system in the RISE project. Stud Health Technol Inform 2000; 57:130-136

Abstract: It is a fact that elderly peoples' life is characterized by problems such as deteriorating health and physical condition, feelings of loneliness, isolation, and of being dependent on others, in many aspects of their everyday lives. The objective of the RISE project is to provide an efficient vehicle for Health Care Professionals for improving Health Care, quality of life and integration of the elderly and disabled people with society by implementing Information technology applications. In particular, RISE project aims in developing a distributed network of service providers across the European Union, which will provide integrated types of services to the elderly and disabled population. The purpose of this paper is to present the impact of this project concerning the Health Informatics sector. It will describe the issues regarding, the needs for education and training of the professionals that arise by the introduction of this concept, and, the possible ways that such a concept forms an efficient vehicle for Health Care services' larger purpose, i.e. to make those comport with elementary individual needs of the elderly and disabled by introducing new methods of efficient health service provision. To achieve this there is an increased need for the training of the professionals and training methodologies designed to assist the Health Professionals achieving the aforementioned tasks

RefID: 521

Bouwmeester C, White R. Consultant pharmacist opportunities in an All-inclusive Care program: Innovative ideas and implementation. Consult Pharm 2009; Conference: ASCP's 40th Annual Meeting Anaheim, CA United States. Conference Start: 20091118 Conference End: 20091120. Conference Publication:(var.pagings):753

Abstract: Purpose: To show the positive impact on patient care that pharmacists provide to participants in a Program of All-inclusive Care for the Elderly (PACE). PACEs utilize multiple healthcare disciplines in an adult day health setting to provide preventative and acute care for frail elders to allow them to remain in the community. PACE is a distinct managed care program under Medicare and Medicaid. A PACE is its own insurance company delivering comprehensive medical and social services to enrolled patients. Pharmacists have many unique opportunities to work within PACE's interdisciplinary team. Methods: Pharmacists implemented several services within an urban PACE. Informal needs assessments, observations, or requests from other disciplines prompted creation of services. Programs include an anticoagulation management service, home visits to patients, in-service presentations, falls prevention, immunization programs, and interdisciplinary care planning. Results: Pharmacy programs positively impacted patient care, and several case studies can be used to demonstrate this achievement. Our anticoagulation service doubled in capacity and involves on average SO encounters per month. In-home visits have determined why patients are falling, and prevented medication incidents. Medication regimen reviews revealed several trends which became focused interventions for the pharmacy team. Pharmacists implemented a medication error and adverse event reporting system that captured 47 and 32 incidents in the first and second quarter respectively. Conclusions: Pharmacy services are well-received by staff and patients, and pharmacists are a valued member of the team. PACEs are ideal settings for pharmacy services. Services provided to our PACE can be replicated or modified to implement in other PACEs

#### RefID: 565

Vallespin B, Fonollosa D, Alonso A, Roca J. The deployment of integrated care services for chronic patients: The NEXES project. Journal on Information Technology in Healthcare 2008; 6(5):334-343

Abstract: The societal adaptations required for reducing the burden of chronic disorders and ageing have been recently framed by the World Health Organization (WHO) initiative on Innovative Care for Chronic Conditions. To meet this challenge, successful deployment of innovative integrated care services to support healthier and independent living for chronic patients and the elderly, is required. The NEXES project aims to deploy four integrated care programs to address various aspects of chronic conditions. The conditions, selected on the basis of promising outcomes generated by previous small-scale randomised controlled trials, are: \* Wellness-rehabilitation \* Enhanced care support for unplanned hospitalisations \* Home hospitalisation of patients with chronic disease exacerbations \* Transient remote support for diagnosis and/ or treatment The project focuses on the main factors modulating the success of an integrated care approach in delivering the services, namely: a) the challenge of co-morbidities; b) articulation of healthcare and community services; c) organisational and educational issues; d) modularity, scalability and interoperability of the Information and Communication Technology platform, and, e) identification of business models ensuring service sustainability. The platform consists of a web-based application addressed to the management of chronic patients and the elderly, facilitating organisational interoperability following a distributed model. This provides the following services: a) Health portal, b) Call centre service, c) Professional mobile access, d) Patient wireless monitoring service, e) Collaborative work service, f) Security modules, and g) Interoperability module with hospital information systems and shared electronic patient records. In the future, it will incorporate knowledge management applications. The Journal on Information Technology in Healthcare

#### RefID: 638

#### Wong RYM, Shaw M, Acton C, Wilbur K, McMillan M, Breurkens E, Sowden C, Trautman SM, Chan N. An Interdisciplinary Approach to Optimize Health Services in a Specialized Acute Care for Elders Unit. Geriatrics Today: Journal of the Canadian Geriatrics Society 2003; 6(3):177-186

Abstract: Background: Acute care for elders (ACE) units can maintain or promote function of acutely ill, older hospitalized patients. Our goal was to optimize interdisciplinary health services for frail elderly patients in a Canadian ACE unit. Methods: A co-management physician practice model was adopted, which encourages collaboration between primary care providers (internists and family physicians) and consultants (specialists in geriatric medicine and geriatric psychiatry). Nursing practice was redesigned to focus on the functional, environmental and cognitive requirements of older patients, in addition to addressing acute nursing needs. Clinical pharmacists routinely monitor all ACE patients for adverse drug reactions and educate patients and families. Automatic physiotherapy screening assessment, and intervention when indicated, has been provided to all patients immediately upon admission, to prevent functional decline. Mobilization is a

team effort with participation of patients, families and staff. Occupational therapists provide proactive interventions by routinely screening patients and intervening early when indicated. This includes providing appropriate equipment and liaising with community therapists. Social workers apply systems theory and use the genogram when dealing with families and patients, to help with effective discharge planning. There is enhanced collaboration with continuing care workers from the community. Results and Conclusion: Early, routine assessment and intervention by different health disciplines in an ACE unit can preserve independence and function of older patients

#### RefID: 657

# Lancaster MM, Thow DP. Care coordination: A case study linking primary health care. Aust J Prim Health 2001; 7(1):82-84

Abstract: The purpose of this project is to demonstrate, through a case study, how York Community Services (YCS) is a leader in the delivery of primary health care through its integration of health, legal and social services. YCS is located in Toronto, Ontario, Canada. YCS's mandate is to serve populations that have traditionally been on the margins of society and therefore have had difficulty accessing the health care system. These include victims of domestic violence, the isolated senior, those with severe mental illness and children living in poverty. Care coordination is a unique model developed by YCS whose main goal is to provide a forum for the client's providers to meet, discuss and coordinate relevant information. Care coordination is used to maintain continuity of care among providers

#### RefID: 659

Becker C. Integrating health services for frail elderly people. Aging - Clinical and Experimental Research 2001; 13(6):412-413

#### RefID: 663

## Cameron S, McKenzie F, Warnock L, Farquhar D. Impact of a nurse led multidisciplinary team on an acute medical admissions unit. Health bulletin 2000; 58(6):512-514

Abstract: OBJECTIVE: To determine the impact of a nurse-led multi-disciplinary team on management of elderly patients with functional problems admitted to an acute medical admission unit. DESIGN: Data collection from the first 16 months of the team's operation. SETTING: A district general hospital, Scotland. SUBJECTS: All elderly patients with functional problems who were considered fit for immediate multi-disciplinary assessment. RESULTS: Over 1000 patients were assessed during the first 16 months. Twenty four per cent of these frail individuals were discharged directly home, of whom, almost half had some form of ongoing support. The remaining 76% were transferred for ongoing care to other wards in the Medical Directorate. Of this group, 49% moved to general medicine, 43% to geriatric assessment and 8% to the Stroke Unit. The team were perceived to improve the appropriateness of these transfers by enabling staff to review both the medical and functional needs of elderly patients when deciding on the best setting for ongoing care. CONCLUSIONS: Immediate multi-disciplinary assessment of elderly patients admitted to a medical admissions unit enables the early supported discharge of a proportion of elderly and enhances the ability of the hospital to place appropriately those patients requiring a longer stay

#### RefID: 665

# Robinson L, Drinkwater C. A significant case audit of a community-based elderly resource team - An opportunity for multidisciplinary teams to introduce clinical governance? Journal of Clinical Governance 2000; 8(2):89-96

Abstract: Background - Analysis of critical or significant cases has been suggested as a method of multidisciplinary audit in primary care. A community-based, multidisciplinary resource team (the elderly resource team) has been established in Newcastle upon Tyne to provide integrated assessment and care for the frail elderly. Objectives - To review the clinical and administrative functioning of the elderly resource team (ERT), through a qualitative audit around significant cases, and to investigate the feasibility and acceptability of significant cases as a method of multiprofessional audit and its effectiveness in producing change in practice. Methods - Facilitated case discussion of significant cases with members of the ERT, four referring primary health care teams and an external facilitator. Following three facilitated review sessions, an audit plan was generated by the ERT. The ERT was visited six months later to assess their adherence to the plan and any subsequent change in practice. One-to-one semi-structured interviews were held with a purposive sample of participants who had attended two or more case discussions. Participants were asked their opinion about the feasibility and acceptability of significant event audit. Results - Eleven cases were discussed. Forty-four participants were involved in the discussions, 18 of whom were interviewed. The elderly resource team implemented the majority of changes in their

Page 37 of 51

audit plan. These were largely qualitative and centred on improving team functioning and effectiveness. All interviewees were positive about the methodology, describing it as practical, motivating, effective and relevant to primary care. Its strengths lay in its focus on real cases, its encouragement of reflective practice and that it afforded immediate and practical solutions to identified concerns. Participants considered an external facilitator essential for this method. Conclusion - Facilitated review of significant cases provides multiprofessional teams with a feasible and acceptable means for clinical audit. This method could be integrated into a clinical governance framework

### RefID: 666

#### Marshall LC. Community service for elderly depressed individuals. Mature Medicine Canada 2000; 3(4):192-193

Abstract: A program is described which provides in-home services required by the elderly with depression, dementia or other mental health problems. The model, undertaken and integrated by occupational therapists, provides community care and, when needed, a psychogeriatric program

### RefID: 667

# Penning MJ, Keating NC. Self-, informal and formal care: Partnerships in community-based and residential long-term care settings. Can J Aging 2000; 19(SUPPL. 1):75-100

Abstract: Increasing emphasis is being placed on the need to have older adults, their families and formal service providers work together collaboratively or 'in partnerships' to provide long-term care, both in community and residential care settings. There is therefore a need to determine how such relationships are currently structured. This paper systematically reviews the results of studies published from 1985 through 1998 on relationships involving self-, informal and formal care within these settings. The findings suggest that formal services are not used to displace or substitute for informal care but rather, that formal services tend to be used to supplement and complement the care provided by the informal network. This is true both in community and residential care settings. Exactly how these partnerships are structured and the relationships between self-care and both informal and formal systems of care are less clear. The findings point to a need to refocus attention away from the creation of partnerships and protecting against unnecessary substitution, towards broader concerns with supporting the partnerships that already exist

### 5. References of excluded articles (n=151)

**Ref ID:3.** Wilhelmson, K., Duner, A., Eklund, K., Gosman-Hedstrom, G., Blomberg, S., Hasson, H., Gustafsson, H., Landahl, S., and Dahlin-Ivanoff, S.. Design of a randomized controlled study of a multi-professional and multidimensional intervention targeting frail elderly people. BMC Geriatrics 2011. 11 (1) 24

**Ref ID:5.** Vedel, I., Monette, M., Beland, F., Monette, J., and Bergman, H.. Ten years of integrated care: backwards and forwards. The case of the province of Quebec, Canada. International Journal of Integrated Care [Electronic Resource] 2011. 11 Spec Ed (#Issue#) e004

**Ref ID:18.** McCarthy, M. and Brajovic, M.. Planning elderly and palliative care in Montenegro. International Journal of Integrated Care [Electronic Resource] 2009. 9 (#Issue#) e09

**Ref ID:20.** Gensichen, J.. IMPACT collaborative care improves depression in elderly patients in primary care in the longer term. Evidence-Based Mental Health 2006. 9 (3) 76

**Ref ID:21.** Kodner, D. L.. Consumer-directed services: lessons and implications for integrated systems of care. International Journal of Integrated Care [Electronic Resource] 2003. 3 (#Issue#) e12

**Ref ID:22.** Slimmer, L. A collaborative care management programme in a primary care setting was effective for older adults with late life depression. Evidence-Based Nursing 2003. 6 (3) 91

Ref ID:25. Heckman, G. A.. Integrated care for the frail elderly. Healthcarepapers 2011. 11 (1) 62

**Ref ID:26.** Henningsen, N. and McAlister, M.. Paradigm shift: shaping policy to meet the needs of our aging population. Healthcarepapers 2011. 11 (1) 20

**Ref ID:41.** Callahan, C. M., Boustani, M. A., Weiner, M., Beck, R. A., Livin, L. R., Kellams, J. J., Willis, D. R., and Hendrie, H. C.. Implementing dementia care models in primary care settings: The Aging Brain Care Medical Home. Aging & Mental Health 2011. 15 (1) 5

**Ref ID:48.** Codde, J., Arendts, G., Frankel, J., Ivey, M., Reibel, T., Bowen, S., and Babich, P.. Transfers from residential aged care facilities to the emergency department are reduced through improved primary care services: an intervention study. Australasian Journal on Ageing 2010. 29 (4) 150

**Ref ID:49.** Sahyoun, N. R., Akobundu, U., Coray, K., and Netterville, L.. Challenges in the delivery of nutrition services to hospital discharged older adults: the community connections demonstration project. Journal of Nutrition for the Elderly 2009. 28 (2) 127

**Ref ID:66.** Chattopadhyay, A. and Bindman, A. B.. Linking a comprehensive payment model to comprehensive care of frail elderly patients: a dual approach. JAMA 3-11-2010. 304 (17) 1948

**Ref ID:69.** Hickman, L. D., Rolley, J. X., and Davidson, P. M.. Can principles of the Chronic Care Model be used to improve care of the older person in the acute care sector?. Collegian: Journal of the Royal College of Nursing, Australia 2010. 17 (2) 63

**Ref ID:85.** Eloranta, S., Welch, A., Arve, S., and Routasalo, P.. A collaborative approach to home care delivery for older

clients: perspectives of home care providers. Journal of Interprofessional Care 2010. 24 (2) 198

**Ref ID:95.** Vedel, I., De, Stampa M., Bergman, H., Ankri, J., Cassou, B., Mauriat, C., Blanchard, F., Bagaragaza, E., and Lapointe, L.. A novel model of integrated care for the elderly: COPA, Coordination of Professional Care for the Elderly. Aging-Clinical & Experimental Research 2009. 21 (6) 414

Ref ID:101. Hebert, R.. Home care: from adequate funding to integration of services. Healthcarepapers 2009. 10 (1) 58

**Ref ID:102.** Lum, J. M. and Aikens, A.. From Denmark to Deep River: integrating care in small and rural communities in Ontario. Healthcarepapers 2009. 10 (1) 50

Ref ID:104. Hansen, E. B.. Integrated care for vulnerable older people in Denmark. Healthcarepapers 2009. 10 (1) 29

**Ref ID:105.** Williams, A. P., Lum, J. M., Deber, R., Montgomery, R., Kuluski, K., Peckham, A., Watkins, J., Williams, A., Ying, A., and Zhu, L.. Aging at home: integrating community-based care for older persons. Healthcarepapers 2009. 10 (1) 8

**Ref ID:109.** Dedhia, P., Kravet, S., Bulger, J., Hinson, T., Sridharan, A., Kolodner, K., Wright, S., and Howell, E.. A quality improvement intervention to facilitate the transition of older adults from three hospitals back to their homes. Journal of the American Geriatrics Society 2009. 57 (9) 1540

**Ref ID:115.** Del, Giudice E., Ferretti, E., Omiciuolo, C., Sceusa, R., Zanata, C., Manganaro, D., and Toigo, G.. The hospitalbased, post-acute geriatric evaluation and management unit: the experience of the acute geriatric unit in Trieste. Archives of Gerontology & Geriatrics 2009. 49 Suppl 1 (#Issue#) 49

**Ref ID:122.** Counsell, S. R., Callahan, C. M., Tu, W., Stump, T. E., and Arling, G. W.. Cost analysis of the Geriatric Resources for Assessment and Care of Elders care management intervention. Journal of the American Geriatrics Society 2009. 57 (8) 1420

**Ref ID:123.** Neill, K. S. and Powell, L.. Mobile interprofessional wellness care of rural older adults. Journal of Gerontological Nursing 2009. 35 (7) 46

**Ref ID:129.** Branca, S., Bennati, E., Ferlito, L., Spallina, G., Cardillo, E., Malaguarnera, M., Motta, M., and IMUSCE.. The health-care in the extreme longevity. Archives of Gerontology & Geriatrics 2009. 49 (1) 32

**Ref ID:139**. Spice, C. L., Morotti, W., George, S., Dent, T. H., Rose, J., Harris, S., and Gordon, C. J.. The Winchester falls project: a randomised controlled trial of secondary prevention of falls in older people. Age & Ageing 2009. 38 (1) 33

**Ref ID:141**. Lee, H. S., Mericle, A. A., Ayalon, L., and Arean, P. A.. Harm reduction among at-risk elderly drinkers: a sitespecific analysis from the multi-site Primary Care Research in Substance Abuse and Mental Health for Elderly (PRISM-E) study. International Journal of Geriatric Psychiatry 2009. 24 (1) 54

**Ref ID:146.** Famadas, J. C., Frick, K. D., Haydar, Z. R., Nicewander, D., Ballard, D., and Boult, C.. The effects of interdisciplinary outpatient geriatrics on the use, costs and quality of health services in the fee-for-service environment. Aging-Clinical & Experimental Research 2008. 20 (6) 556

Ref ID:156. Polivka, L. and Zayac, H.. The aging network and managed long-term care. Gerontologist 2008. 48 (5) 564

**Ref ID:165.** O'Reilly, J., Lowson, K., Green, J., Young, J. B., and Forster, A.. Post-acute care for older people in community hospitals--a cost-effectiveness analysis within a multi-centre randomised controlled trial. Age & Ageing 2008. 37 (5) 513

**Ref ID:167.** Masters, S., Halbert, J., Crotty, M., and Cheney, F.. What are the first quality reports from the Transition Care Program in Australia telling us?. Australasian Journal on Ageing 2008. 27 (2) 97

**Ref ID:171.** Boult, C., Christmas, C., Durso, S. C., Leff, B., Boult, L. B., and Fried, L. P.. Perspective: transforming chronic care for older persons. [Review] [47 refs]. Academic Medicine 2008. 83 (7) 627

**Ref ID:176.** Cott, C. A., Falter, L. B., Gignac, M., and Badley, E.. Helping networks in community home care for the elderly: types of team. Canadian Journal of Nursing Research 2008. 40 (1) 19

**Ref ID:177.** Forbes, D. A. and Neufeld, A.. Looming dementia care crisis: Canada needs an integrated model of continuing care now!. [Review] [47 refs]. Canadian Journal of Nursing Research 2008. 40 (1) 9

**Ref ID:178.** Boyd, C. M., Shadmi, E., Conwell, L. J., Griswold, M., Leff, B., Brager, R., Sylvia, M., and Boult, C.. A pilot test of the effect of guided care on the quality of primary care experiences for multimorbid older adults. Journal of General Internal Medicine 2008. 23 (5) 536

**Ref ID:183.** Melis, R. J., van Eijken, M. I., Teerenstra, S., van, Achterberg T., Parker, S. G., Borm, G. F., van de Lisdonk, E. H., Wensing, M., and Rikkert, M. G.. A randomized study of a multidisciplinary program to intervene on geriatric syndromes in vulnerable older people who live at home (Dutch EASYcare Study). Journals of Gerontology Series A-Biological Sciences & Medical Sciences 2008. 63 (3) 283

**Ref ID:184.** Melis, R. J., Adang, E., Teerenstra, S., van Eijken, M. I., Wimo, A., van, Achterberg T., van de Lisdonk, E. H., and Rikkert, M. G.. Cost-effectiveness of a multidisciplinary intervention model for community-dwelling frail older people. Journals of Gerontology Series A-Biological Sciences & Medical Sciences 2008. 63 (3) 275

**Ref ID:186.** Stott, D. J., Langhorne, P., and Knight, P. V.. Multidisciplinary care for elderly people in the community. Lancet 1-3-2008. 371 (9614) 699

**Ref ID:188.** McCormack, B., Mitchell, E. A., Cook, G., Reed, J., and Childs, S.. Older persons' experiences of whole systems: the impact of health and social care organizational structures. Journal of Nursing Management 2008. 16 (2) 105

**Ref ID:190.** Sister, Kathleen Popko. Developing an aging strategy for the future. Catholic Health East establishes a 2017 preferred health care delivery model. Health Progress 2008. 89 (1) 31

**Ref ID:196.** Counsell, S. R., Callahan, C. M., Clark, D. O., Tu, W., Buttar, A. B., Stump, T. E., and Ricketts, G. D.. Geriatric care management for low-income seniors: a randomized controlled trial. JAMA 12-12-2007. 298 (22) 2623

**Ref ID:199.** Zhang, Y. T., Yan, Y. S., and Poon, C. C.. Some perspectives on affordable healthcare systems in China. Conference Proceedings: 2007. .. Annual International Conference of the IEEE Engineering in Medicine & Biology Society. 2007 (#Issue#) 6155

**Ref ID:202.** Sturdy, D., Jackson, J., and Abley, C.. The Single Assessment Process (DH 2001) and the development of integrated care planning. Nursing Older People 2007. 19 (8) 14

**Ref ID:205.** Manthorpe, J., Clough, R., Cornes, M., Bright, L., Moriarty, J., Iliffe, S., and OPRSI (Older People Researching Social Issues). Four years on: the impact of the National Service Framework for Older People on the experiences, expectations and views of older people. Age & Ageing 2007. 36 (5) 501

**Ref ID:206.** Ayalon, L., Arean, P. A., Linkins, K., Lynch, M., and Estes, C. L. Integration of mental health services into primary care overcomes ethnic disparities in access to mental health services between black and white elderly. American Journal of Geriatric Psychiatry 2007. 15 (10) 906

**Ref ID:216.** Vogel, A., Ransom, P., Wai, S., and Luisi, D.. Integrating health and social services for older adults: a case study of interagency collaboration. Journal of Health & Human Services Administration 2007. 30 (2) 199

**Ref ID:222.** Roberts, R. M., Dalton, K. L., Evans, J. V., and Wilson, C. L. A service model of short-term case management for elderly people at risk of hospital admission. Australian Health Review 2007. 31 (2) 173

**Ref ID:226.** Crossen-Sills, J., Bilton, W., Bickford, M., Rosebach, J., and Simms, L. Home care today: showcasing interdisciplinary management in home care. Home Healthcare Nurse 2007. 25 (4) 245

**Ref ID:248.** Blasinsky, M., Goldman, H. H., and Unutzer, J.. Project IMPACT: a report on barriers and facilitators to sustainability. Administration & Policy in Mental Health 2006. 33 (6) 718

**Ref ID:253.** Benedict, L., Robinson, K., and Holder, C.. Clinical nurse specialist practice within the Acute Care for Elders interdisciplinary team model. [Review] [12 refs]. Clinical Nurse Specialist 2006. 20 (5) 248

**Ref ID:255.** Challis, D., Stewart, K., Donnelly, M., Weiner, K., and Hughes, J.. Care management for older people: does integration make a difference?. Journal of Interprofessional Care 2006. 20 (4) 335

**Ref ID:258.** Ballard, C. and Fox, C.. Effectiveness of collaborative care for elderly adults with Alzheimer's disease in primary care. Lancet Neurology 2006. 5 (8) 644

**Ref ID:259**. Oslin, D. W., Grantham, S., Coakley, E., Maxwell, J., Miles, K., Ware, J., Blow, F. C., Krahn, D. D., Bartels, S. J., Zubritsky, C., Olsen, E., Kirchner, J. E., and Levkoff, S.. PRISM-E: comparison of integrated care and enhanced specialty referral in managing at-risk alcohol use.[Erratum appears in Psychiatr Serv. 2006 Oct;57(10):1492 Note: Olsen, Ed [added]; Kirchner, JoAnn E [added]; Levkoff, Sue [added]]. Psychiatric Services 2006. 57 (7) 954

**Ref ID:262.** Beland, F., Bergman, H., Lebel, P., Dallaire, L., Fletcher, J., Contandriopoulos, A. P., and Tousignant, P.. Integrated services for frail elders (SIPA): a trial of a model for Canada. Canadian Journal on Aging 2006. 25 (1) 5

**Ref ID:263.** Clarkson, P., Venables, D., Hughes, J., Burns, A., and Challis, D.. Integrated specialist assessment of older people and predictors of care-home admission. Psychological Medicine 2006. 36 (7) 1011

**Ref ID:264.** Plochg, T., Delnoij, D. M., Hoogedoorn, N. P., and Klazinga, N. S.. Collaborating while competing? The sustainability of community-based integrated care initiatives through a health partnership. BMC Health Services Research 2006. 6 (#Issue#) 37

**Ref ID:267.** Callahan, C. M., Boustani, M. A., Unverzagt, F. W., Austrom, M. G., Damush, T. M., Perkins, A. J., Fultz, B. A., Hui, S. L., Counsell, S. R., and Hendrie, H. C.. Effectiveness of collaborative care for older adults with Alzheimer disease in

primary care: a randomized controlled trial. JAMA 10-5-2006. 295 (18) 2148

**Ref ID:274.** Chen, H., Coakley, E. H., Cheal, K., Maxwell, J., Costantino, G., Krahn, D. D., Malgady, R. G., Durai, U. N., Quijano, L. M., Zaman, S., Miller, C. J., Ware, J. H., Chung, H., Aoyama, C., Van Stone, W. W., and Levkoff, S. E.. Satisfaction with mental health services in older primary care patients. American Journal of Geriatric Psychiatry 2006. 14 (4) 371

**Ref ID:278.** Hunkeler, E. M., Katon, W., Tang, L., Williams, J. W., Jr., Kroenke, K., Lin, E. H., Harpole, L. H., Arean, P., Levine, S., Grypma, L. M., Hargreaves, W. A., and Unutzer, J.. Long term outcomes from the IMPACT randomised trial for depressed elderly patients in primary care. BMJ 4-2-2006. 332 (7536) 259

**Ref ID:284.** Mjelde-Mossey, L. A.. Social work's partnership in community-based stroke prevention for older adults: a collaborative model. Social Work in Health Care 2005. 42 (2) 57

**Ref ID:295.** Vidan, M., Serra, J. A., Moreno, C., Riquelme, G., and Ortiz, J.. Efficacy of a comprehensive geriatric intervention in older patients hospitalized for hip fracture: a randomized, controlled trial. Journal of the American Geriatrics Society 2005. 53 (9) 1476

**Ref ID:296.** Biein, B.. An older person as a subject of comprehensive geriatric approach. Roczniki Akademii Medycznej W Bialymstoku 2005. 50 Suppl 1 (#Issue#) 189

**Ref ID:314.** Arean, P. A., Ayalon, L., Hunkeler, E., Lin, E. H., Tang, L., Harpole, L., Hendrie, H., Williams, J. W., Jr., Unutzer, J., and IMPACT, Investigators. Improving depression care for older, minority patients in primary care. Medical Care 2005. 43 (4) 381

**Ref ID:315.** Hayward, K. S.. Facilitating interdisciplinary practice through mobile service provision to the rural older adult. [Review] [19 refs]. Geriatric Nursing 2005. 26 (1) 29

**Ref ID:319.** Martin, G. P., Peet, S. M., Hewitt, G. J., and Parker, H.. Diversity in intermediate care. Health & Social Care in the Community 2004. 12 (2) 150

**Ref ID:320.** Kharicha, K., Levin, E., Iliffe, S., and Davey, B.. Social work, general practice and evidence-based policy in the collaborative care of older people: current problems and future possibilities. Health & Social Care in the Community 2004. 12 (2) 134

**Ref ID:322.** Raymond, J., Kirkwood, H., and Looi, J.. Commitment and collaboration for excellence in older persons' mental health: the ACT experience. Australasian Psychiatry 2004. 12 (2) 130-#End Page. "2: level#, Current State: Excluded."

**Ref ID:323.** Brand, C. A., Jones, C. T., Lowe, A. J., Nielsen, D. A., Roberts, C. A., King, B. L., and Campbell, D. A. A transitional care service for elderly chronic disease patients at risk of readmission. Australian Health Review 13-12-2004. 28 (3) 275

**Ref ID:324.** Kroemer, D. J., Bloor, G., and Fiebig, J.. Acute Transition Alliance: rehabilitation at the acute/aged care interface. Australian Health Review 13-12-2004. 28 (3) 266

Ref ID:329. Parkinson, W.. Multi-disciplinary person-centred care: has government policy helped or hindered?. Nursing

Older People 2004. 16 (7) 14

**Ref ID:333.** Gallo, J. J., Zubritsky, C., Maxwell, J., Nazar, M., Bogner, H. R., Quijano, L. M., Syropoulos, H. J., Cheal, K. L., Chen, H., Sanchez, H., Dodson, J., Levkoff, S. E., and PRISM-E Investigators.. Primary care clinicians evaluate integrated and referral models of behavioral health care for older adults: results from a multisite effectiveness trial (PRISM-e). Annals of Family Medicine 2004. 2 (4) 305

Ref ID:338. Negus, J.. Improving care of older people through intermediate services. Nursing Times 13-7-2004. 100 (28) 34

**Ref ID:339.** Bartels, S. J., Coakley, E. H., Zubritsky, C., Ware, J. H., Miles, K. M., Arean, P. A., Chen, H., Oslin, D. W., Llorente, M. D., Costantino, G., Quijano, L., McIntyre, J. S., Linkins, K. W., Oxman, T. E., Maxwell, J., Levkoff, S. E., and PRISM-E Investigators.. Improving access to geriatric mental health services: a randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. American Journal of Psychiatry 2004. 161 (8) 1455

**Ref ID:340.** Meehan, T. P., Tate, J. P., Holmboe, E. S., Teeple, E. A., Elwell, A., Meehan, R. R., Petrillo, M. K., and Huot, S. J.. A collaborative initiative to improve the care of elderly Medicare patients with hypertension. American Journal of Medical Quality 2004. 19 (3) 103

**Ref ID:345.** Jack, L., Jr., Airhihenbuwa, C. O., Namageyo-Funa, A., Owens, M. D., and Vinicor, F.. The psychosocial aspects of diabetes care. Using collaborative care to manage older adults with diabetes. Geriatrics 2004. 59 (5) 26

**Ref ID:352.** Teo, P.. Health care for older persons in Singapore: integrating state and community provisions with individual support. Journal of Aging & Social Policy 2004. 16 (1) 43-#End Page. "2: level#, Current State: Excluded."

**Ref ID:355.** Levkoff, S. E., Chen, H., Coakley, E., Herr, E. C., Oslin, D. W., Katz, I., Bartels, S. J., Maxwell, J., Olsen, E., Miles, K. M., Constantino, G., and Ware, J. H.. Design and sample characteristics of the PRISM-E multisite randomized trial to improve behavioral health care for the elderly. Journal of Aging & Health 2004. 16 (1) 3

**Ref ID:358.** Dyer, C. B., Hyer, K., Feldt, K. S., Lindemann, D. A., Busby-Whitehead, J., Greenberg, S., Kennedy, R. D., and Flaherty, E.. Frail older patient care by interdisciplinary teams: a primer for generalists. [Review] [17 refs]. Gerontology & Geriatrics Education 2003. 24 (2) 51

**Ref ID:362.** Brown, L., Tucker, C., and Domokos, T.. Evaluating the impact of integrated health and social care teams on older people living in the community. Health & Social Care in the Community 2003. 11 (2) 85

Ref ID:363. McCloughry, H., Walker, D., and Sturdy, L. A short step from home. Professional Nurse 2003. 19 (2) 68

**Ref ID:366.** Lubben, J. E. and Damron-Rodriguez, J.. An international approach to community health care for older adults. Family & Community Health 2003. 26 (4) 338

**Ref ID:369.** Kobb, R., Hoffman, N., Lodge, R., and Kline, S.. Enhancing elder chronic care through technology and care coordination: report from a pilot. Telemedicine Journal & E-Health 2003. 9 (2) 189

**Ref ID:371.** Glendinning, C.. Breaking down barriers: integrating health and care services for older people in England.

Health Policy 2003. 65 (2) 139

**Ref ID:374.** Gong, J. and Greenwood, R.. PACE community care & more. Integrated care program offers opportunities for providers seeking alternatives. Provider 2003. 29 (6) 40

**Ref ID:378.** Rummery, K. and Coleman, A.. Primary health and social care services in the UK: progress towards partnership?. Social Science & Medicine 2003. 56 (8) 1773

**Ref ID:382.** Nunez, D. E., Armbruster, C., Phillips, W. T., and Gale, B. J.. Community-based senior health promotion program using a collaborative practice model: the Escalante Health Partnerships. Public Health Nursing 2003. 20 (1) 25

**Ref ID:383.** Stoesz, D.. Age concerns: innovation through care management. Journal of Aging & Social Policy 2002. 14 (3-4) 245

**Ref ID:384.** Yip, J. Y., Myrtle, R. C., Wilber, K. H., and Grazman, D. N.. The networks and resource exchanges in communitybased systems of care. Journal of Health & Human Services Administration 2002. 25 (2) 219

**Ref ID:385**. Fletcher, A. E., Jones, D. A., Bulpitt, C. J., and Tulloch, A. J.. The MRC trial of assessment and management of older people in the community: objectives, design and interventions [ISRCTN23494848]. BMC Health Services Research 25-10-2002. 2 (1) 21

**Ref ID:387.** Applebaum, R., Straker, J., Mehdizadeh, S., Warshaw, G., and Gothelf, E.. Using high-intensity care management to integrate acute and long-term care services: substitute for large scale system reform?. Care Management Journals 2002. 3 (3) 113

**Ref ID:388.** Brooks, N.. Intermediate care rapid assessment support service: an evaluation. British Journal of Community Nursing 628. 7 (12) 623

**Ref ID:391.** Chunharas, S.. The system of care for the elderly in Thailand: capitalizing from an integrated community-based health system through reform. [Review] [31 refs]. Aging-Clinical & Experimental Research 2002. 14 (4) 258

**Ref ID:392.** Bernabei, R., Landi, F., and Zuccala, G.. Health care for older persons in Italy. Aging-Clinical & Experimental Research 2002. 14 (4) 247

**Ref ID:393.** Coleman, E. A.. Challenges of systems of care for frail older persons: the United States of America experience. [Review] [29 refs]. Aging-Clinical & Experimental Research 2002. 14 (4) 233

**Ref ID:397.** Hin, P. Y., Brennan, J., and O'Neill, D.. Community and social interventions at a geriatric medical OPD. Irish Medical Journal 2002. 95 (8) 239

**Ref ID:398.** Challis, D., Reilly, S., Hughes, J., Burns, A., Gilchrist, H., and Wilson, K.. Policy, organisation and practice of specialist old age psychiatry in England. International Journal of Geriatric Psychiatry 2002. 17 (11) 1018

**Ref ID:400.** Moss, J. E., Flower, C. L., Houghton, L. M., Moss, D. L., Nielsen, D. A., and Taylor, D. M.. A multidisciplinary Care Coordination Team improves emergency department discharge planning practice. Medical Journal of Australia 21-10-2002. 177 (8) 435

**Ref ID:401.** Keough, M. E., Field, T. S., and Gurwitz, J. H.. A model of community-based interdisciplinary team training in the care of the frail elderly. [Review] [0 refs]. Academic Medicine 2002. 77 (9) 936

**Ref ID:403.** Forti, E. M. and Koerber, M.. An outreach intervention for older rural African Americans. Journal of Rural Health 2002. 18 (3) 407

**Ref ID:412.** Challis, D., von, Abendorff R., Brown, P., Chesterman, J., and Hughes, J.. Care management, dementia care and specialist mental health services: an evaluation. International Journal of Geriatric Psychiatry 2002. 17 (4) 315

**Ref ID:414.** Sulch, D., Evans, A., Melbourn, A., and Kalra, L. Does an integrated care pathway improve processes of care in stroke rehabilitation? A randomized controlled trial. Age & Ageing 2002. 31 (3) 175

Ref ID:427. Mills, J.. Collaborative care. Nursing Times #year#. 97 (46) 38

**Ref ID:433.** Mutch, C., Tobin, M., Hickie, I., Davenport, T., and Burke, D.. Improving community-based services for older patients with depression: the benefits of an educational and service initiative. Australian & New Zealand Journal of Psychiatry 2001. 35 (4) 449-#End Page. "2: level#, Current State: Excluded."

**Ref ID:444.** Boult, C., Boult, L. B., Morishita, L., Dowd, B., Kane, R. L., and Urdangarin, C. F.. A randomized clinical trial of outpatient geriatric evaluation and management. Journal of the American Geriatrics Society 2001. 49 (4) 351

**Ref ID:445.** Smyth, C., Dubin, S., Restrepo, A., Nueva-Espana, H., and Capezuti, E.. Creating order out of chaos: models of GNP practice with hospitalized older adults. [Review] [31 refs]. Clinical Excellence for Nurse Practitioners 2001. 5 (2) 88

**Ref ID:457.** Naleppa, M. J. and Reid, W. J.. Integrating case management and brief-treatment strategies: a hospital-based geriatric program. Social Work in Health Care 2000. 31 (4) 1

Ref ID:465. Powell, D. and Peile, E.. Joint working. It's a stitch-up. Health Service Journal 27-4-2000. 110 (5702) 24

Ref ID:471. Moak, G. S.. Geriatric psychiatry and managed care. Psychiatric Clinics of North America 2000. 23 (2) 437

**Ref ID:472.** Newcomer, R., Harrington, C., and Kane, R.. Implementing the second generation social health maintenance organization. Journal of the American Geriatrics Society 2000. 48 (7) 829

**Ref ID:473.** Charalambakis, D., Samiotakis, Y., and Sasson, L.. Computerised coordinated care system in the RISE project. Studies in Health Technology & Informatics 2000. 57 (#Issue#) 130

**Ref ID:477.** Burns, R., Nichols, L. O., Martindale-Adams, J., and Graney, M. J.. Interdisciplinary geriatric primary care evaluation and management: two-year outcomes. Journal of the American Geriatrics Society 2000. 48 (1) 8

**Ref ID:484.** Radwany, S., Hudak, C., Hoiles, E., Allen, K., and Holder, C.. Palliative care and geriatric medicine: A model of community collaboration across the continuum (420). Journal of Pain and Symptom Management 2011. Conference: Annual Assembly of American Academy of Hospice and Palliative Medicine and Hospice and Palliative Nurses Association Vancouver, BC Canada. Conference Start: 20110216 Conference End: 20110219. Conference Publication: (var.pagings) 244

Ref ID:489. Gillespie, S. A. and Conway, S. A.. Evidenced-based geriatric care principles: Successful integration within

Page 46 of 51

Inpatient Behavioral Health: Undertaking the leadership role of improving system-wide geriatric care. American Journal of Geriatric Psychiatry 2010. Conference: 2010 AAGP Annual Meeting Savannah, GA United States. Conference Start: 20100305 Conference End: 20100308. Conference Publication: (var.pagings) S85

**Ref ID:494.** Bell, S. H., Tracy, C. S., and Upshur, R. E. G.. The assessment and treatment of a complex geriatric patient by an interprofessional primary care team. BMJ Case Reports 2011. , 2011. Date of Publication: 2011.

**Ref ID:495.** Meyer, H.. Innovation profile: A new care paradigm slashes hospital use and nursing home stays for the elderly and the physically and mentally disabled. Health Affairs 2011. 30 (3) 412

**Ref ID:496.** Meyer, H.. Innovation profile: Using teams, real-time information, and teleconferencing to improve elders' hospital care. Health Affairs 2011. 30 (3) 408

**Ref ID:520.** Neill, K. S. and Powell, L.. Mobile interprofessional wellness care of rural older adults: Student outcomes and future perspectives. Journal of Gerontological Nursing 2009. 35 (7) 46-#End Page. "2: level#, Current State: Excluded."

**Ref ID:521.** Bouwmeester, C. and White, R.. Consultant pharmacist opportunities in an All-inclusive Care program: Innovative ideas and implementation. Consultant Pharmacist 2009. Conference: ASCP's 40th Annual Meeting Anaheim, CA United States. Conference Start: 20091118 Conference End: 20091120. Conference Publication: (var.pagings) 753

**Ref ID:529.** Halcomb, E. J.. Feasibility and sustainability of a model of multidisciplinary case conferencing in residential aged care. Australian Journal of Primary Health 2009. 15 (3) 238

**Ref ID:552.** Leftwich, Beales J. and Edes, T.. Veteran's Affairs Home Based Primary Care. Clinics in Geriatric Medicine 2009. 25 (1) 149

**Ref ID:558**. Peleg, R., Press, Y., Asher, M., Pugachev, T., Glicensztain, H., Lederman, M., and Biderman, A.. An intervention program to reduce the number of hospitalizations of elderly patients in a primary care clinic. BMC Health Services Research 2008. 8 (pp 36)

**Ref ID:562.** Chan, H.-T., Cheng, S.-J., and Su, H.-J.. Integrated care for the elderly in the community. International Journal of Gerontology 2008. 2 (4) 167

**Ref ID:565.** Vallespin, B., Fonollosa, D., Alonso, A., and Roca, J.. The deployment of integrated care services for chronic patients: The NEXES project. Journal on Information Technology in Healthcare 2008. 6 (5) 334

**Ref ID:571.** Unutzer, J., Katon, W. J., Fan, M.-Y., Schoenbaum, M. C., Lin, E. H. B., Della Penna, R. D., and Powers, D.. Long-term cost effects of collaborative care for late-life depression. American Journal of Managed Care 2008. 14 (2) 95

**Ref ID:576.** Arean, P. A., Gum, A. M., Tang, L., and Unutzer, J.. Service use and outcomes among elderly persons with low incomes being treated for depression. Psychiatric Services 2007. 58 (8) 1057

**Ref ID:578.** Solheim, K., McElmurry, B. J., and Kim, M. J.. Multidisciplinary teamwork in US primary health care. Social Science and Medicine 2007. 65 (3) 622-#End Page. "2: level#, Current State: Excluded." Ref ID:592. D'Agostino, C. S., Barry, K. L., Blow, F. C., and Podgorski, C.. Community interventions for older adults with comorbid substance abuse: The Geriatric Addictions Program (GAP). Journal of Dual Diagnosis 2006. 2 (3) 31

**Ref ID:598.** Axelsson, R. and Axelsson, S. B.. Integration and collaboration in public health - A conceptual framework. International Journal of Health Planning and Management 2006. 21 (1) 75

**Ref ID:604.** Austrom, M. G., Hartwell, C., Moore, P. S., Boustani, M., Hendrie, H. C., and Callahan, C. M.. A care management model for enhancing physician practice for Alzheimer disease in primary care. Clinical Gerontologist 2005. 29 (2) 35

**Ref ID:606.** Callahan, C. M., Kroenke, K., Counsell, S. R., Hendrie, H. C., Perkins, A. J., Katon, W., Noel, P. H., Harpole, L., Hunkeler, E. M., and Unutzer, J.. Treatment of depression improves physical functioning in older adults. Journal of the American Geriatrics Society 2005. 53 (3) 367

**Ref ID:618.** Geriatric medicine: A clinical imperative for an aging population, part I. Annals of Long-Term Care 2005. 13 (3) 18

**Ref ID:619.** Huby, G. and Rees, G.. The effectiveness of quality improvement tools: Joint working in integrated community teams. International Journal for Quality in Health Care 2005. 17 (1) 53

**Ref ID:631.** Moroz, A., Schoeb, V., Fan, G., Vitale, K., and Lee, M.. Convalescence care for seniors of lower Manhattan: An interdisciplinary outreach, rehabilitation, and education model. International Journal of Rehabilitation Research 2004. 27 (1) 75

**Ref ID:632.** Leung, A. C. T., Liu, C.-P., Chow, N. W. S., and Chi, I.. Cost-Benefit Analysis of a Case Management Project for the Community-Dwelling Frail Elderly in Hong Kong. Journal of Applied Gerontology 2004. 23 (1) 70-#End Page. "2: level#, Current State: Excluded."

**Ref ID:633.** Reynolds III, C. F.. Meeting the mental health needs of older adults in primary care: How do we get the job done?. Clinical Psychology: Science and Practice 2003. 10 (1) 109

**Ref ID:637.** Allen, K. R., Hazelett, S. E., Palmer, R. R., Jarjoura, D. G., Wickstrom, G. C., Weinhardt, J. A., Lada, R., Holder, C. M., and Counsell, S. R.. Developing a Stroke Unit Using the Acute Care for Elders Intervention and Model of Care. Journal of the American Geriatrics Society 2003. 51 (11) 1660

**Ref ID:638.** Wong, R. Y. M., Shaw, M., Acton, C., Wilbur, K., McMillan, M., Breurkens, E., Sowden, C., Trautman, S. M., and Chan, N.. An Interdisciplinary Approach to Optimize Health Services in a Specialized Acute Care for Elders Unit. Geriatrics Today: Journal of the Canadian Geriatrics Society 2003. 6 (3) 177

**Ref ID:641.** Master, R., Simon, L., and Goldfield, N.. Commonwealth care alliance: A new approach to coordinated care for the chronically III and frail elderly that organizationally integrates consumer involvement. Journal of Ambulatory Care Management 2003. 26 (4) 355

**Ref ID:648.** Johnson, P., Wistow, G., Schulz, R., and Hardy, B.. Interagency and interprofessional collaboration in community care: The interdependence of structures and values. Journal of Interprofessional Care 2003. 17 (1) 69

**Ref ID:656.** Stuart, M. and Weinrich, M.. Home is where the help is: community-based care in Denmark. Journal of Aging & Social Policy 2001. 12 (4) 81

**Ref ID:657.** Lancaster, M. M. and Thow, D. P.. Care coordination: A case study linking primary health care. Australian Journal of Primary Health 2001. 7 (1) 82

**Ref ID:659.** Becker, C.. Integrating health services for frail elderly people. Aging - Clinical and Experimental Research 2001. 13 (6) 412

**Ref ID:662.** Schraeder, C., Shelton, P., and Sager, M.. The effects of a collaborative model of primary care on the mortality and hospital use of community-dwelling older adults. Journals of Gerontology - Series A Biological Sciences and Medical Sciences 2001. 56 (2) M106

**Ref ID:663.** Cameron, S., McKenzie, F., Warnock, L., and Farquhar, D.. Impact of a nurse led multidisciplinary team on an acute medical admissions unit. Health bulletin 2000. 58 (6) 512

**Ref ID:665.** Robinson, L. and Drinkwater, C.. A significant case audit of a community-based elderly resource team - An opportunity for multidisciplinary teams to introduce clinical governance?. Journal of Clinical Governance 2000. 8 (2) 89

Ref ID:666. Marshall, L. C.. Community service for elderly depressed individuals. Mature Medicine Canada 2000. 3 (4) 192

**Ref ID:667.** Penning, M. J. and Keating, N. C.. Self-, informal and formal care: Partnerships in community-based and residential long-term care settings. Canadian Journal on Aging 2000. 19 (SUPPL. 1) 75

**Ref ID:668.** Kellogg, F. R. and Brickner, P. W.. Long-term Home Health Care for the Impoverished Frail Homebound Aged: A Twenty-Seven-Year Experience. Journal of the American Geriatrics Society 2000. 48 (8) 1002

**Ref ID:669.** Sommers, L. S., Marton, K. I., Barbaccia, J. C., and Randolph, J.. Physician, nurse, and social worker collaboration in primary care for chronically ill seniors. Archives of Internal Medicine 2000. 160 (12) 1825

**Ref ID:714.** Latour, C. H., Bosmans, J. E., van Tulder, M. W., de, Vos R., Huyse, F. J., de, Jonge P., van Gemert, L. A., and Stalman, W. A.. Cost-effectiveness of a nurse-led case management intervention in general medical outpatients compared with usual care: an economic evaluation alongside a randomized controlled trial (Structured abstract). Journal of Psychosomatic Research 2007. 62 (3) 363-

**Ref ID:715.** Harris, R., Ashton, T., Broad, J., Connolly, G., and Richmond, D.. The effectiveness, acceptability and costs of a hospital-at-home service compared with acute hospital care: a randomized controlled trial (Structured abstract). Journal of Health Services Research and Policy 2005. 10 (3) 158

**Ref ID:717.** Green, J., Young, J., Forster, A., Mallinder, K., Bogle, S., Lowson, K., and Small, N.. Effects of locality based community hospital care on independence in older people needing rehabilitation: randomised controlled trial. BMJ 6-8-2005. 331 (7512) 317

#### **APPENDIX A: Grey literature searches**

# A pragmatic randomised controlled trial to evaluate the effectiveness and cost effectiveness of Collaborative cARE for people with DEMentia in primary care (CARE-DEM trial) (Project)

NHS, results due 2014

## http://www.hta.ac.uk/project/2462.asp

Our proposal is to test one interpretation of the proposed advisers role. Research from the USA has revealed the potential of a 'collaborative care' approach. Collaborative care means professionals from diffierent backgrounds (gneneral practitioners, specialists in old age psychiatry, community mental health nurse) support a 'case manager' who works closely with the patient and their family. This close working relationship is based on a management plan of support, brief psychological therapy and where appropriate medication that is tailored to each person with dementia and their family or other carers.

Protocol: <u>http://www.hta.ac.uk/protocols/200800530099.pdf</u> N.B. References – p. 19-20

Collaborative care and active surveillance for screen-positive elders with sub-clinical depression: a pilot study and definitive and randomised evaluation - the CASPER trial

NHS, results due 2015

### http://www.hta.ac.uk/project/2143.asp

The current study brings together 3 established elements (screening for depression, collaborative care and low intensity psychological intervention) to see whether collaborative care reduces depression symptom severity in older adults in a cost-effective manner compared withholder adults who are managed by usual GP care. This intervention does not involve the use of anti-depressants which are generally not effective in this group. Protocol: <u>http://www.hta.ac.uk/protocols/200800190004.pdf</u>

Divergent models of integration: the Canadian way,

Int J Integrated Care, May, 2011

http://www.ijic.org/index.php/ijic/article/viewArticle/URN%3ANBN%3ANL%3AUI%3A10-1-101421/1247

Aging in Ontario: an ICES chartbook of health service use by older adults ICES, 2010 http://www.ices.on.ca/file/AAH%20Chartbook interactive final Feb2010.pdf

Aging in the community OHTAC, 2008 <u>http://www.health.gov.on.ca/english/providers/program/mas/tech/ohtas/tech\_aic\_20081002.html</u> N.B. Dementia care <u>http://www.health.gov.on.ca/english/providers/program/mas/tech/reviews/pdf/rev\_aic\_dementia\_20081002.pdf</u>

Three years on – caring in partnership: older people and nursing staff working towards the future. Royal College of Nursing, 2007 http://www.rcn.org.uk/ data/assets/pdf\_file/0004/115474/003195.pdf

Integrated service provision to ensure persons' functional autonomy Edisem, 2005 (Canada) <u>http://www.prismaquebec.ca/documents/document/Prisma\_English.pdf</u> *Includes extensive references to various elderly models of care* 

What is the effectiveness of old-age mental health services? WHO, 2004 http://www.euro.who.int/ data/assets/pdf file/0008/74690/E83685.pdf

The report states that overall, the strongest evidence supports the development of community multidisciplinary teams as a major service-delivery component, and this should be encouraged in all European countries, as should partnerships with

Page 50 of 51

consumers, non-governmental organizations, primary care providers, social services, long-term residential care providers and other medical services.

Assessment processes for older people NZ Guidelines Group, 2004 http://www.nzgg.org.nz/guidelines/0030/Assess Processes GL.pdf

Improving Access to Geriatric Mental Health Services: A Randomized Trial Comparing Treatment Engagement With Integrated Versus Enhanced Referral Care for Depression, Anxiety, and At-Risk Alcohol Use Am J Psychiatry, 2004 <u>http://ajp.psychiatryonline.org/cgi/content/abstract/161/8/1455</u>

Primary Care Clinicians Evaluate Integrated and Referral Models of Behavioral Health Care For Older Adults: Results From a Multisite Effectiveness Trial (PRISM-E) Annals of Family Med, 2004 <u>http://annfammed.org/cgi/content/abstract/2/4/305</u>

PRISMA: a new model of Integrated Service Delivery for the Frail Older People in Canada, 2003 http://www.prismaquebec.ca/documents/document/Articleintegratedcare.pdf

Does integration really make a difference? A comparison of old age psychiatry services in England and Northern Ireland. Int J Geriatr Psychiatry. 2003 Oct;18(10):887-93. http://www.ncbi.nlm.nih.gov/pubmed/14533121?dopt=AbstractPlus

Frail elderly patients PRISMA, 2003 http://www.prismaquebec.ca/documents/document/frailelderlypatients.pdf

Fully integrated care for frail elderly: two American models Int J Integrated Care, 2000 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1533997/

Comprehensive assessment of older people The King's Fund, 1999 <u>http://www.dhcarenetworks.org.uk/ library/Resources/ICN/CompAssessOPBriefing%5B1%5D.pdf</u>