Table 2. Case management interventions and corresponding comparators and outcomes from the literature included in this systematic review.

Authors, Country	**Number of studies included in systematic review**	**Intervention**	**Comparator**	**Outcomes**
Sivananthan *et.al,* Canada	12	7 dementia care processes recommended by best practice guidelines: ・Formal memory testing ・Imaging ・Laboratory testing ・Interventions ・Counseling ・Community service ・Specialist referrals	Clinical services provided by physicians to older adults diagnosed with dementia.	・8 out of 12 studies reported that <60% of physicians conducted formal memory testing, while 3 studies reported <15%, and 1 study <4% ・33% to 91% of family physician's prescribed medications for dementia and consequent behavioral problems ・33-80% of physicians reported the use of CT or MRI as a diagnostic tool, and >75% used blood work ・2 studies reported that >80% of physicians provided counseling.
Khanassov *et.al,* Canada	23	Case Management interventions comprising all components identified by the Case Management Society of America: ・Case finding and screening ・Assessment ・Care planning ・Implementation and management ・Monitoring ・Review	No comparator	・Only 63% of case managers clearly explained their role to the patientcaregiver dyads while 25% did not give any detail during assessment ・52% of case managers indicated that poor communication with healthcare providers negatively affected their work ・Limiting factors to case management implementation were: insufficient knowledge of diagnostic tools, absence of training, and the absence of the case manager in the primary care setting.

Davies *et.al,* United Kingdom	10	Decision-making interventions with decision aids in dementia care (i.e. audio guided booklet, a printed decision aids about dementia and feeding; a living with dementia Guiding Options for Living with Dementia (GOLD) book; DECIDE intervention: a guided decision aid participants read and complete with support of decision coach to assist in making decisions regarding care home placement, video decision aid and structured meeting between surrogate decision maker and interdisciplinary care plan team; a video decision aid and audio description of advanced dementia)	・The majority of studies used a control group ・One study used solely listening to a verbal narrative of the disease.	**Place of care:** ・DECIDE decreased decisional conflict in caregivers ・GOLD showed less of an increase in burden and greater increase in the knowledge of caregivers **Goals of care:** ・A video decision aid combined with a structured meeting improved communication between caregivers and professionals and improved the concordance on the goals of care after 9 months **Meta-analysis:** ・Two RCTs (N=72) included. ・Decision aids are effective in decreasing decisional conflict in caregivers (standardized MD=− 0.50, 95% CI [− 0.97, − 0.02]). This suggests increased confidence in decisionmaking and understanding of the decisions. ・Decisional conflict was measured using the Decision Conflict Scale at 3 months post intervention.

Tilburgs *et.al,* Australia	16	Advanced care planning (ACP)	No comparator	**Facilitators for ACP:** ・An early start while cognitive decline is mild. ・Inclusion of all stakeholders and a good relationship between the GP, patient, and family carers. ・Discussion of social and medical issues aimed at maintaining a normal life. ・Decision aids that provide information and structure which contribute to decision making.
				Barriers for ACP: ・Uncertainty about the timing of ACP. ・How to plan for an uncertain future. ・Lack of knowledge about dementia and patient's lack of knowledge of diagnosis. ・Bad relationships among stakeholders. ・Stress/fear caused by ACP. ・Who should take initiative for ACP. ・Difficulties assessing the dementia patient's decisional capacities. ・Changing preferences.

Mukadam *et.al,* United Kingdom	13	Interventions intended to increase the detection of : ・Dementia ・Suspected dementia ・People presenting with memory complaints	**RCT:** ・Control groups. **Non-randomized studies and pre-post study designs:** ・Comparison groups.	・2 of 3 **RCTs** of physician education found group educational interventions increased the likelihood of physicians suspecting dementia. ・**Non-randomized study** findings suggest that clinician education in primary care interventions can increase the proportion of patients in whom physicians suspect dementia; Untargeted community leaflet campaigns did not increase dementia diagnosis rates. ・**Pre-post comparison studies** showed no positive effects for individual clinician training, group training with a routine screening programme or a targeted leaflet campaign. An increased number of memory clinics correlated with an increased number of dementia diagnoses.

Khanassov *et.al*, Canada	43	**Case management (CM):** ・Assessment ・Care planning ・Implementation ・Management ・Regular follow-up	**RCT:** ・Control group **Qualitative studies:** ・No control	**RCT evidence:** ・4/10 trials showed a decrease in the frequency of behavioral symptoms of dementia in the CM intervention group (mean effect size 0.88), while 2/7 reported a decrease in depression symptoms. ・No effect on cognition and perceived health was observed. ・8/11 trials found no effect on institutionalization. ・Hospital admissions decreased (MES=0.66) in 2/5 studies. ・Decreased ER admission was observed in 1/3 studies (effect size: 0.17) and a decrease in length of hospital stay was shown in both of the studies that evaluated this outcome (MES=1.06). ・For caregivers, 5/10 studies showed a decrease in depression (MES=0.68) and 4/11 showed a decrease in burden (MES=0.5). **Barriers to implementation of CM using outcome matching:** ・Intervention durations being too short. ・Need for high-intensity CM. ・Scarce communication. ・Case manager and physician in different locations. ・Lack of healthcare providers with geriatric training.	

				Addressing these barriers correlated with better outcomes, as studies addressing more barriers resulted in	

				more positive outcomes (agreement κ=0.94; CI, 0.82-1.1).	

Perry *et.al,* Netherlands	6	Series of seminars and the appointment of dementia care managers.	Control groups in studies: ・ Clinical practice guidelines for dementia received by mail ・No training ・No seminars ・No training and no dementia care managers ・Short, partly interactive seminar on dementia diagnostics (3 hours).	・Intervention clinics demonstrated better health-related quality of life (QoL), overall quality of health care in patients, family caregiving quality, social support and more family caregivers reported receiving all the help they needed. ・The health-related QoL of the caregiver did not increase. ・Higher proportions of patients were newly diagnosed with dementia following educational workshops and computerized Decision Support System (DSS) group compared to the control group. ・After a 2-h seminar for physicians there were higher rates of 'suspected dementia' and lower rates of both 'uncertain' and 'non-suspected' diagnoses when compared to the control group. ・Both the mean compliance per patient to the total set of 23 quality	

				indicators, and the compliance per indicator for 21 of 23 quality indicators, were better in intervention clinics than in control clinics. ・Physicians gained more knowledge after a 5-h seminar than a 3-h seminar. ・After 9-months, more physicians in the intervention group correctly answered 2 questions about decision-making compared to the control group. Those in the intervention group more strongly agreed that 'Older patients with dementia are difficult to manage in primary care' than the PCPs in the control group.