

Background

- In order to reduce costs and improve care coordination among multiple providers for effective management of older adult patients with multiple chronic conditions, research on the implementation and effectiveness of comprehensive care models and programs have emerged.¹⁻²
- Comprehensive primary care models target the primary care setting by organizing and coordinating care between the primary care provider and other interdisciplinary team members specific to patient needs.
- Regarding the management of chronic conditions in the older adult population, four comprehensive primary care models are within widespread use across the United States: Chronic Care Model (CCM), Guided Care Model (GC), Program of All-Inclusive Care for the Elderly (PACE), and Geriatric Resources for Assessment and Care of Elders (GRACE).

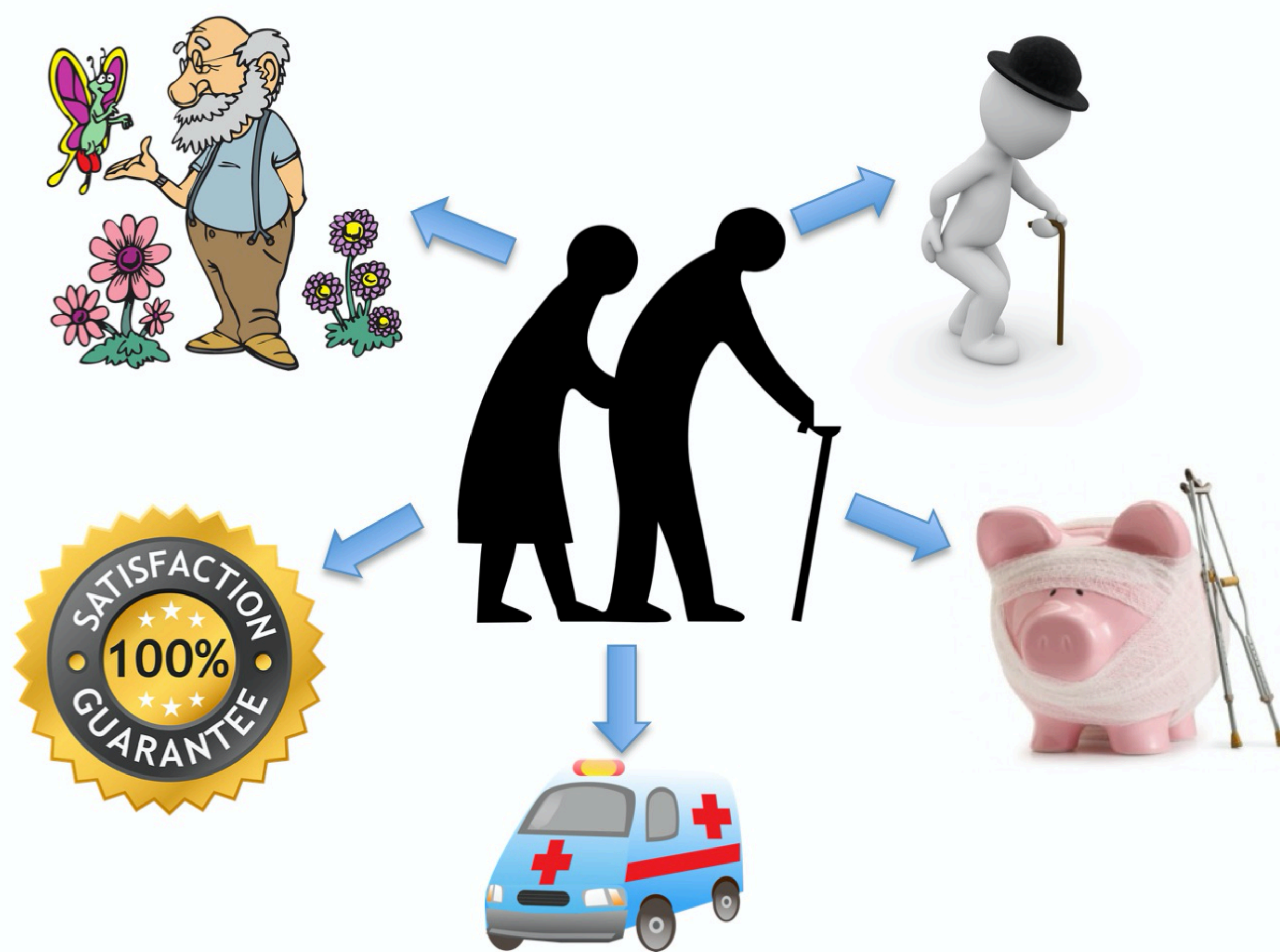
Table 1. Description of Models

	CCM	PACE	GRACE	GC
Began	1998	1990	2002	2001
Healthcare Team	Primary care physician (PCP) as primary provider; Interdisciplinary team members specific patients' individual needs	Team comprising physicians, nurse practitioners, nurses, social workers, therapists, van drivers, and aides.	GRACE support team (clinical social worker & nurse practitioner) Interdisciplinary team (geriatrician, pharmacist, physical therapist, mental health social worker, community-based services liaison)	Certified guided care nurse (CGN) and 2-5 primary care physicians
Patient Eligibility	Single or multiple chronic conditions	Nursing home care eligible	Low income	High risk of using health services
Service Setting Delivery	PCP's office with connectivity to off-site specialist services	PACE day center, patient home, inpatient facilities	Patient home, PCP's office with connectivity to off-site specialist services	Patient home, PCP's office with connectivity to off-site specialist services
Population	Variable	Age 55 and older	Age 65 and older	Age 65 and older
Funding	Variable, no Medicare or Medicaid coverage	Capitated Medicare and Medicaid coverage	Variable, Medicare will cover 10% of costs	Variable, no Medicare or Medicaid coverage



Purpose

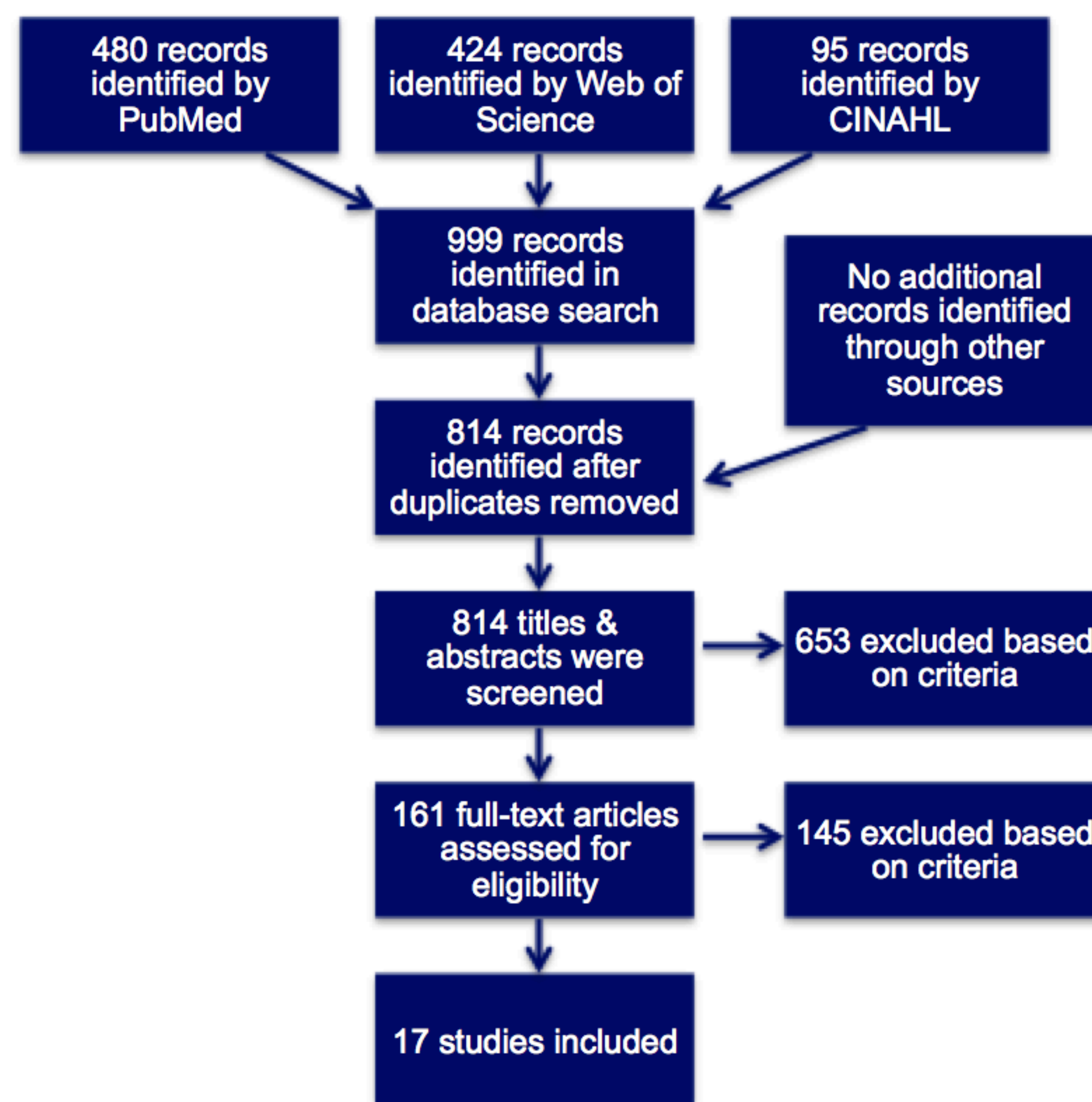
The purpose of this study is to investigate the health system impacts and quality of care of four well-established comprehensive primary care models by reviewing their associated healthcare costs, utilization of healthcare services, functional status, satisfaction, and quality of life outcomes.



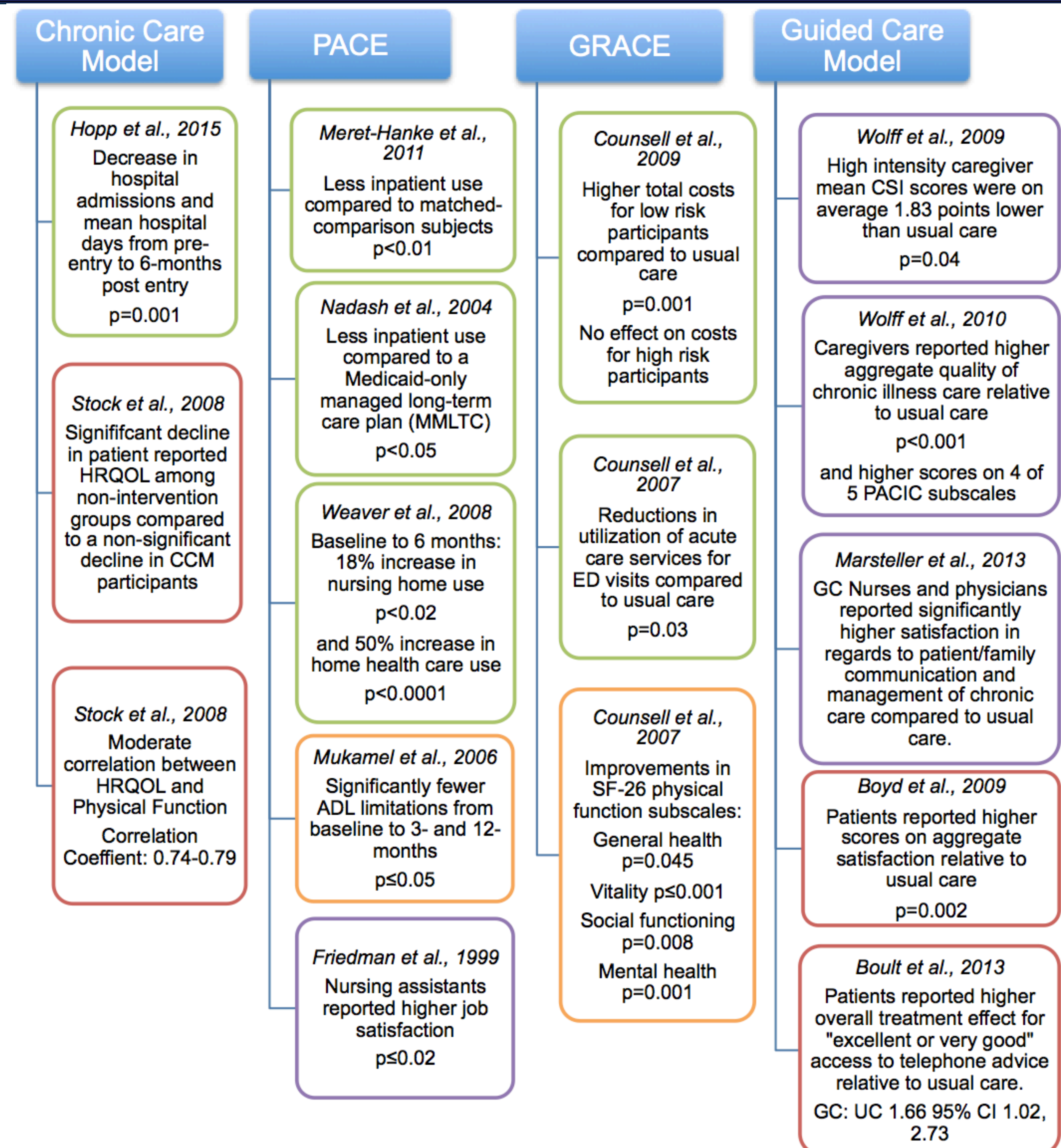
Methods

We searched PubMed, CINAHL, and Web of Science from January 1995 to February 2016. To be included, studies had to:

- be conducted in the United States
- be published in the English language
- use one of the four chosen models as the intervention
- target adults 55 years of age or older with multiple chronic conditions, frailty, or nursing home eligibility
- report outcomes concerned with health services utilization, costs, functional status, satisfaction, or quality of life.



Results



Green: cost and utilization of healthcare resources. Orange: functional status, Purple: satisfaction. Red: quality of life. Articles with no significant data: Segelman et al., 2014; Sylvia et al., 2008; Wieland et al., 2013

Conclusions

- Utilization of healthcare services and cost outcomes associated with these four established models are inconsistent, but CCM and PACE may result in reduction of costs and some utilization of healthcare services.
- GRACE and PACE had positive effects on functional status.
- Caregiver satisfaction was significantly higher for GC compared to usual care. PACE and GC showed high provider satisfaction that may be attributed to successful integration of care among multiple providers.
- GC and CM showed a beneficial effect on quality of life.
- We did not identify any studies that included the physical therapist as a key member of the model.

Clinical Relevance

This review can inform healthcare systems of the effectiveness of comprehensive primary models for management of multiple chronic conditions in community-dwelling older adults. Opportunities exist for physical therapists to be key members of comprehensive primary care models.

Acknowledgements / References

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