



Quality for patients with complex conditions defined through Care Management Plus

David A. Dorr, Hanh Tran, Cherie P. Bruncker

Many patients with complex and multiple chronic illnesses are at high risk for morbidity and death

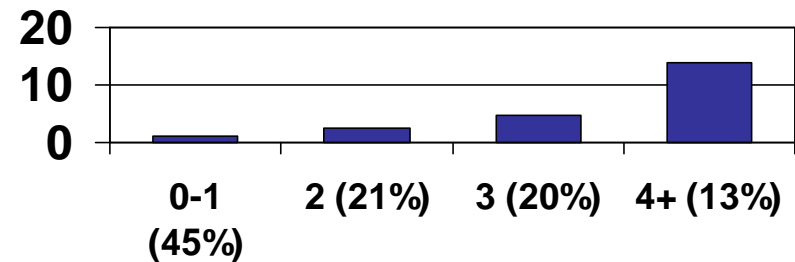
Morbidity

- more disease exacerbations
- increased hospitalizations (up to 90x) and cost

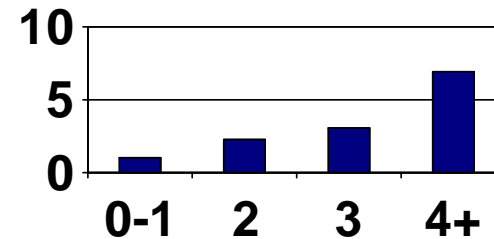
Death

- Increased risk

Annual per capita cost in \$1,000s by # of chronic conditions



Odds Ratio of Death in next year by number of conditions



Applying self-management to people with complex medical and social issues to provide patient-centered care

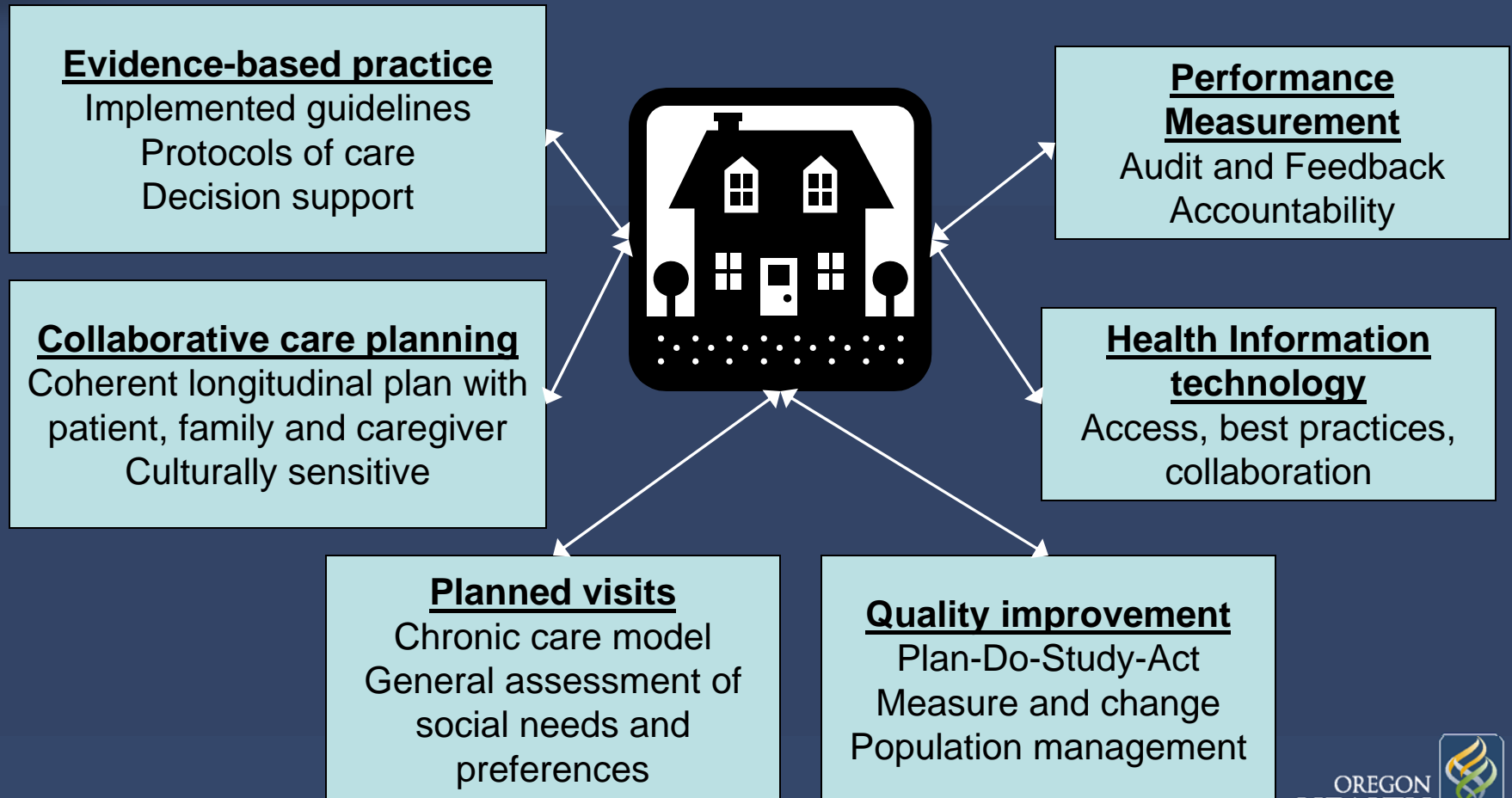
- Their preferences
- Their knowledge
- Their fears
- Empowerment
- Tracking (No one gets lost)
- Team expertise

Agency
Health literacy
Readiness to change
Culture
Economics
Engagement

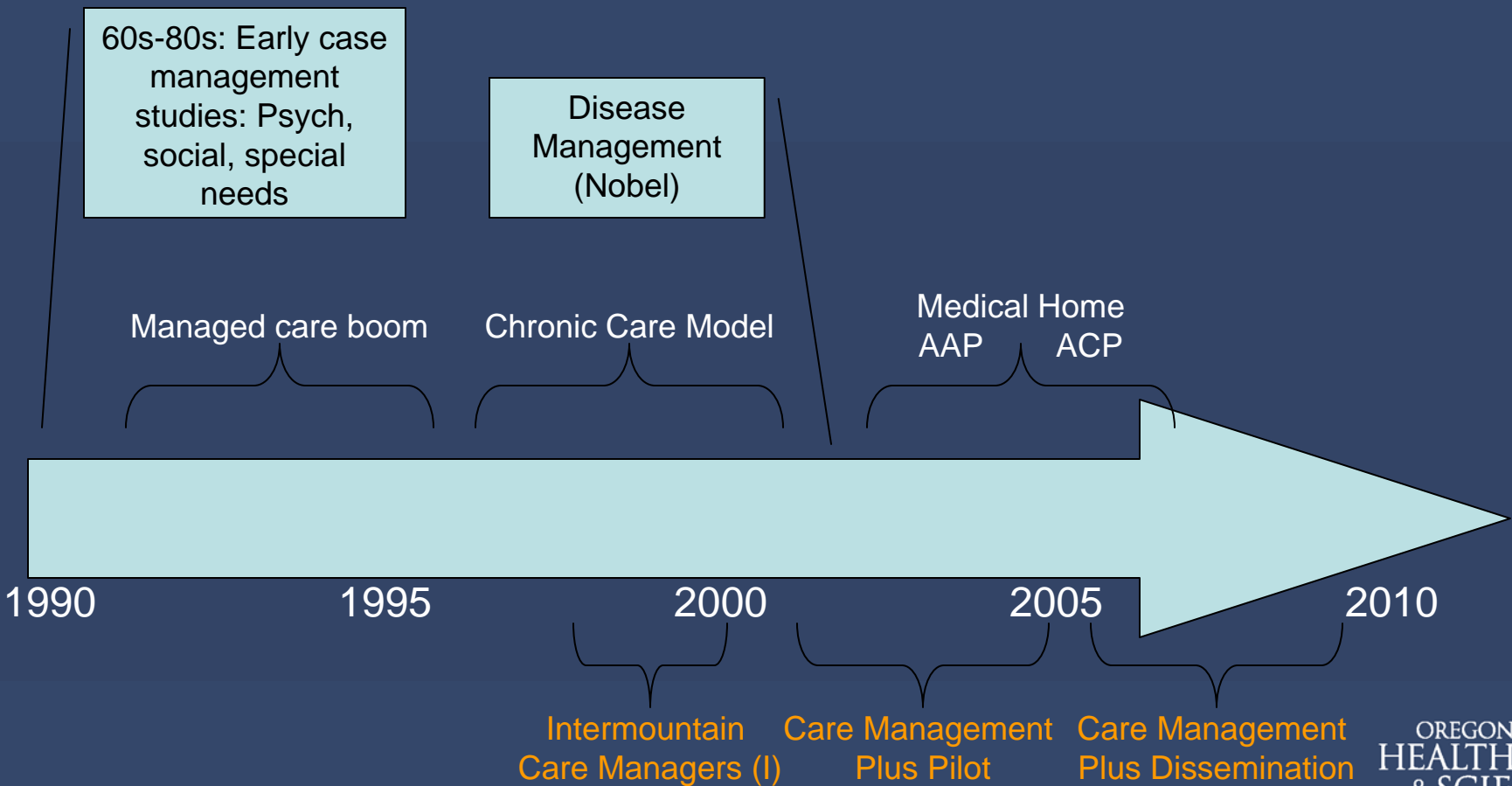
How can we measure these?

The “medical home” may provide a more accurate measurement of high quality care

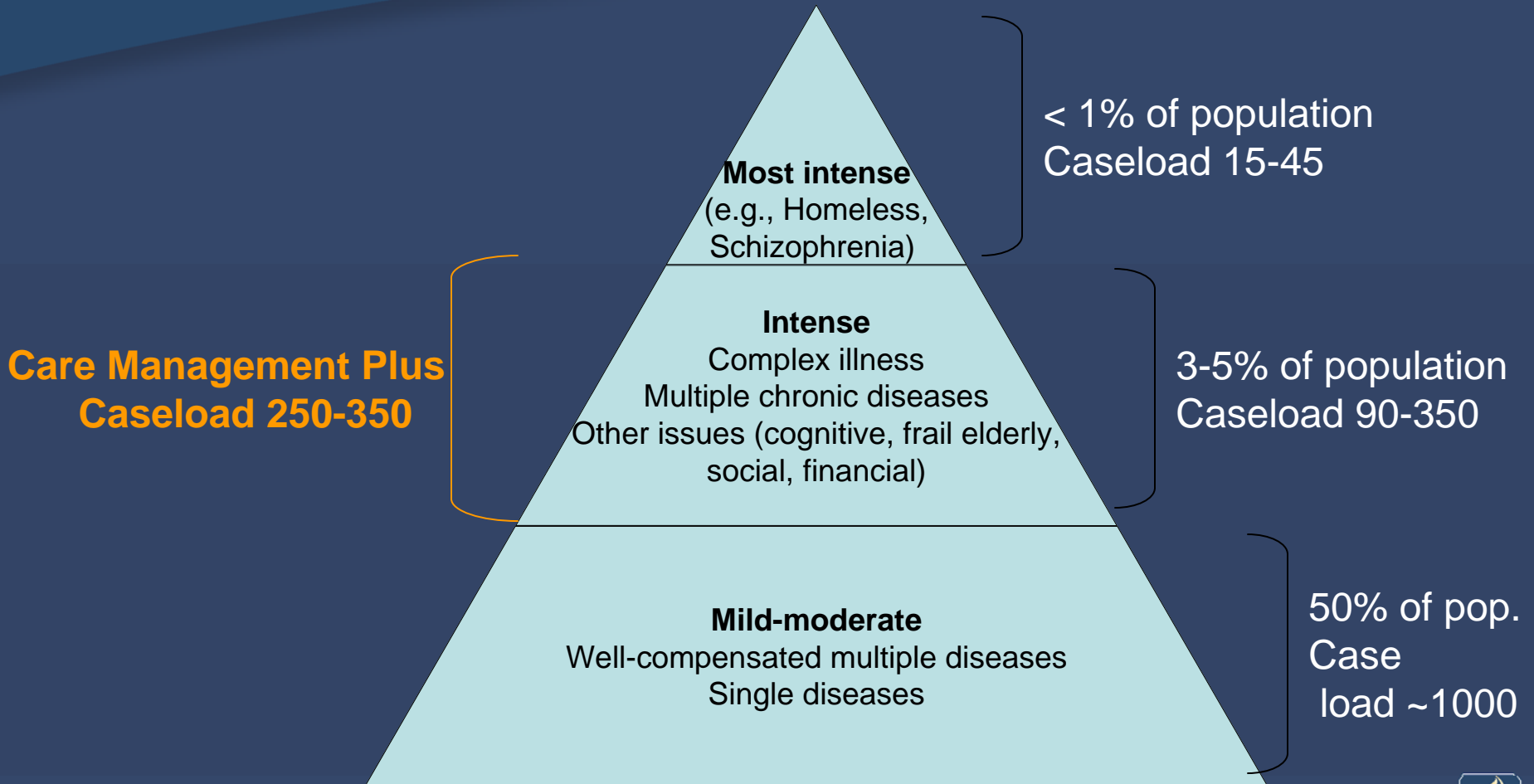
Health care teams partner with patients & caregivers to ensure that all of their health care is effectively managed and coordinated.



Care Management Systems may help provide the kind of specific, patient-centered care



Care management varies by intensity and function for different populations and needs



Major hypotheses

Current/suggested quality measurement for patients with complex illness may be poor.

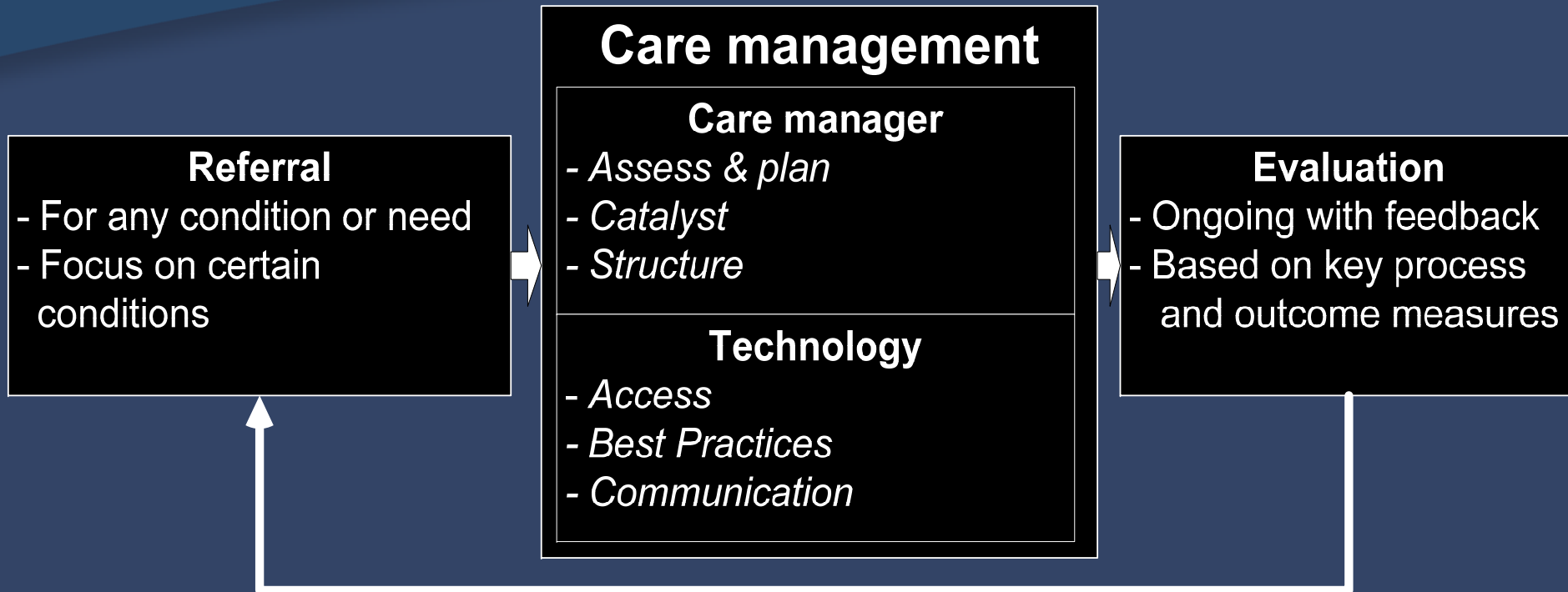
- Can we quantify the degree of problem measurement (e.g., different goals, barriers, etc.) for this population?

Metrics focused on patient-specific issues (e.g., individual cases) may better capture quality

- Can we identify these?

Study Design

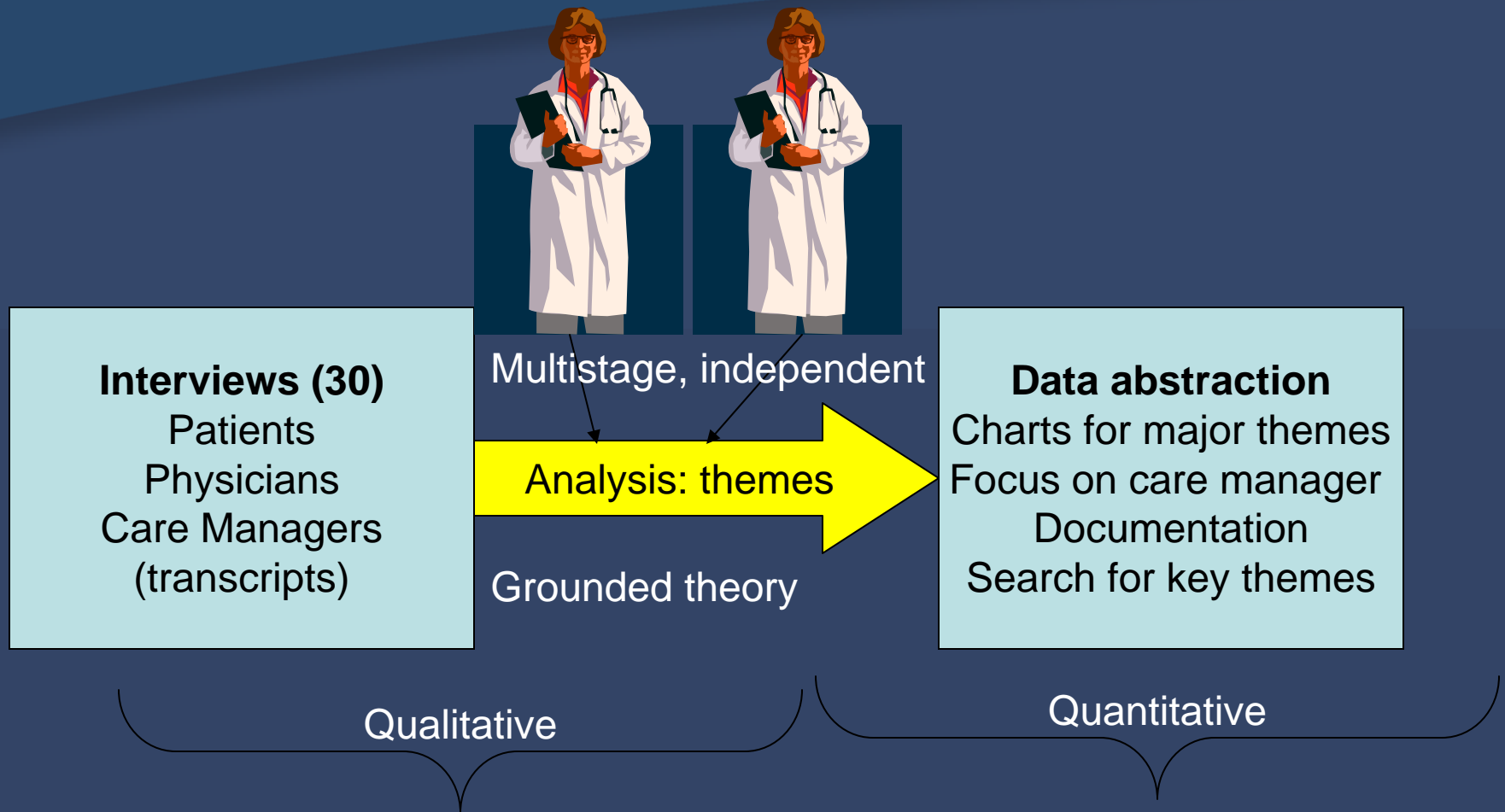
In 7 primary care clinics



Quantitative: Care Managers tracked all of their **services** to patients as they set goals, co-created care plans, and coordinated and facilitated care.

Qualitative: Semi-structured interviews with patients, physicians, and care managers to define aspects of quality for themselves (30 total participants)

Methods: exploratory interviews (qualitative) and data abstraction for concepts (quantitative)



Analysis of mixed (qualitative and quantitative) study

- Qualitative results: **themes** were developed independently by investigators using a grounded technique
 - Focused on quality goals and barriers
- Quantitative results: tracked **barriers** and **conflicting goals** in care plans through IT system.
- Descriptive

Definition of standard quality measures (all single disease)

Care managers were trained to focus on quality measures

- Diabetes (testing frequency, glucose control)
- Cardiovascular (lipid control, blood pressure)
- Mental illness (depression, anxiety)

But also assessed social, senior needs, etc.

“Do you have trouble paying for your medications?”

“Do you have trouble with your memory?”

Pay for performance was in effect for the primary care settings (~5-10% of total pay).

Almost all patients referred to Care Management Plus had multiple chronic illnesses

4,735 referred

- Average # of chronic illnesses: 3.3
- % with 2 or more: 92%
- Average age 70.6
- Percent with documented significant 'social issues' 20.9%

Qualitative themes (30 participants)

- Quality of life
- Coordination of care
- Patient Assessment and Preferences for care
- Prioritization

Quality of life

Barriers for quality of life were stress and worry from illnesses and life situations.

Quality of life focused on helping patients set goals for themselves and manage their own illnesses.

- Barrier: “you also have arthritis and heart problems like I do you are just at your wits end ... ” Pt
- Goal: “[helping the patient in] having a more productive, a more enjoyable life in the time that she’s been given” MD

Qualitative themes: Coordination / facilitation / connection

Barriers: patients could not see the way through to access the services they needed

Goals: to avoid harm from treatments coming from multiple sources

- “She was a life-saver in **guiding** us through [the exacerbation of illness]“ pt
- “[for] a patient that is very difficult ... I’m someone who coordinates their care ... communicates with the doctor ... [if a treatment] doesn’t work or is hurting them.” CM

Qualitative theme: assessment and preference seeking

Barriers: general assessment required for social, economic, other barriers

Goals: patient-centric goal setting

- “having weight loss, terrible fatigue ... on multiple medications [and not compliant] ... found that she wasn’t able to eat ...” MD
- “I usually ask them what their biggest fear is or ... or worry is ... I learned early on ... [they] don’t hear anything until I got to the part that they were most worried about” CM
- “[I ask them] what are your fears? Because a lot of them ... don’t discuss these” CM

Qualitative theme : prioritization

Barriers: multiple illnesses, not enough time; conflicts

Goals: prioritize key health states first – takes time to move forward.

- “I don’t have the time to sort through all the conditions ... the CM helps work through this” MD
- “[The CM] walked me through [my MD visit] I was so overwhelmed ...” Pt
- “anxiety levels ... and depression can really interfere [with success]” CM

In all, 4,735 patients were seen in 2004-05, receiving 22,899 care management services.

Service category	All patients	Examples
ALL	22,899	
Following evidence-based protocols	12,955 (56.6%)	Diabetes, CV, Mental Health protocol
General education	6,808 (29.7%)	Condition specific, General (e.g. safety)
Communication	6,789 (29.7%)	Discussion of results, plan of care
Motivating patients	6,243 (27.3%)	Coaching phone call
Addressing barriers	8,221 (35.9%)	Cost of medication, cognitive difficulties

Barrier examples*

- Can't afford medications / treatments (22.4%)
- Living conditions / social issues (15.9%)
- Other health conditions (10.0%)
- Cognitive issues inhibiting self-care (8.1%)
- Adverse events from medications, limiting choices (4.1%)

* Patients may have multiple barriers

Conflicting goals

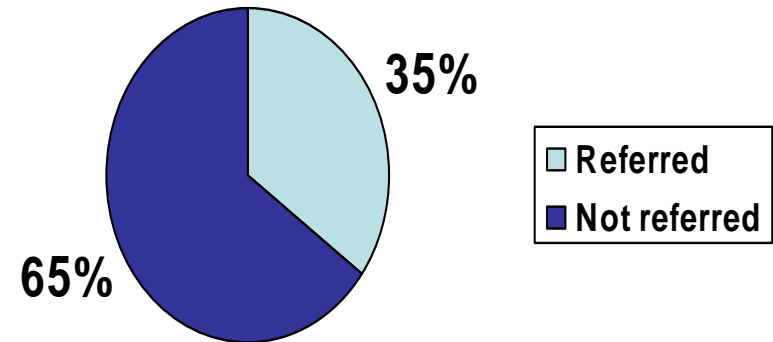
9.2% had conflicting goals documented

- Goal setting different (7.1%)
- End of life care (2.2%)
- Previous adverse events (e.g., a fall with antihypertensives (3.1%))

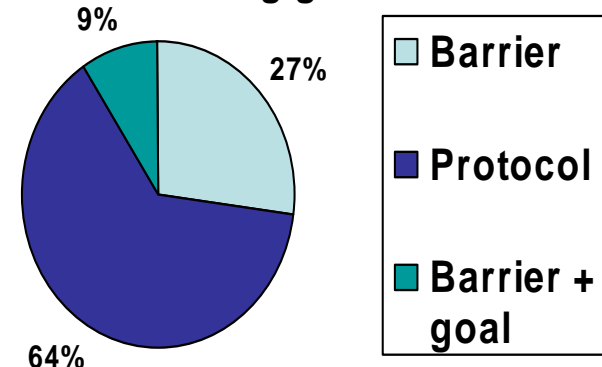
Conclusions

- About 36% (10% of eligible patients in the practice) had barriers or different goals.
- Reasons for the different goals were many and were found in CM documentation
- Patients with complex needs are not likely to fit into simple quality measures.

% of patients with 1+ chronic illness referred



% of pts referred with barriers or conflicting goals



Limitations

- Likely **under-reported** barriers in this population
 - Secondary analysis of data collected for other purposes
 - Patients referred for complex illness and/or barriers
- No comparison group and rest of population unassessed