Transforming Care with Health Information

Robert Reid MD PhD
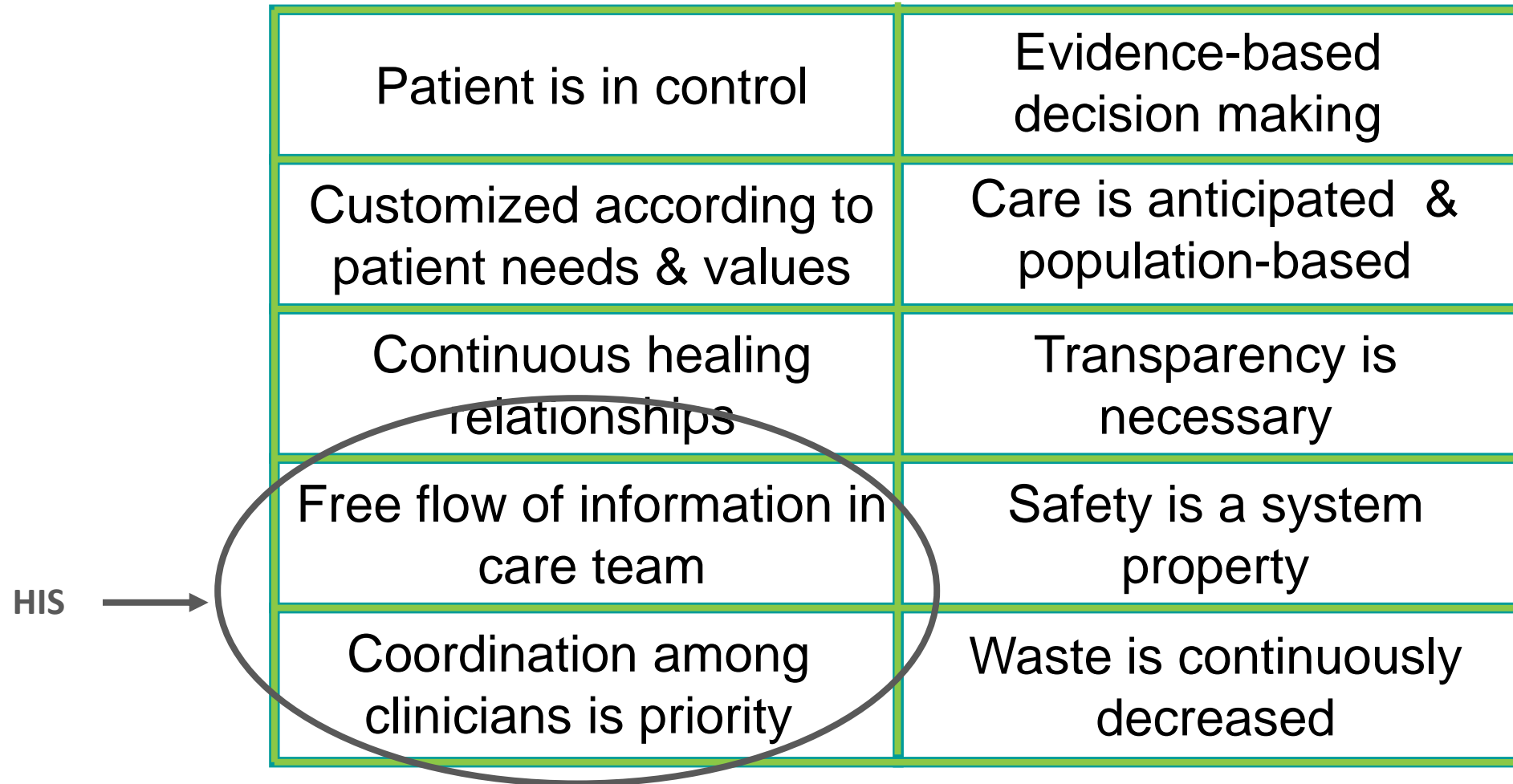**Chief Scientist and SVP, Trillium Health Partners, Mississauga, ON**
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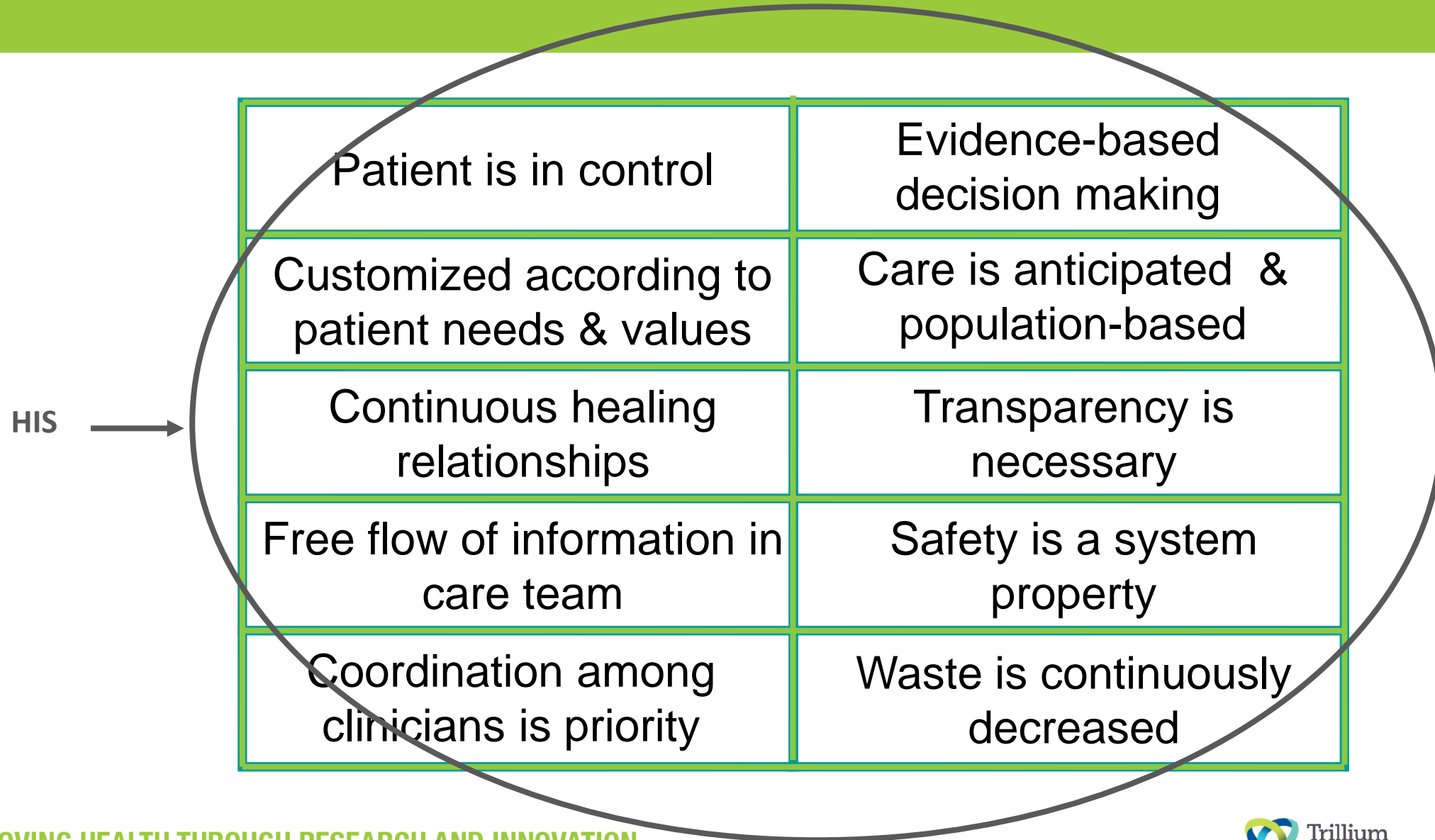
A TRANSFORMED HEALTHCARE SYSTEM….

Patient is in control	Evidence-based decision making
Customized according to patient needs & values	Care is anticipated & population-based
Continuous healing relationships	Transparency is necessary
Free flow of information for care team	Safety is a system property
Coordination among clinicians is priority	Waste is continuously decreased

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IMPROVING HEALTH THROUGH RESEARCH AND INNOVATION

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A STRONG PRIMARY CARE BASE

Observational evidence is clear that healthcare systems that emphasize primary care (access, continuity, comprehensiveness, care coordination) achieve:

Better Health Outcomes
- Better health in areas with higher primary care supply
- Attributes of primary care associated with better outcomes

Lower Costs
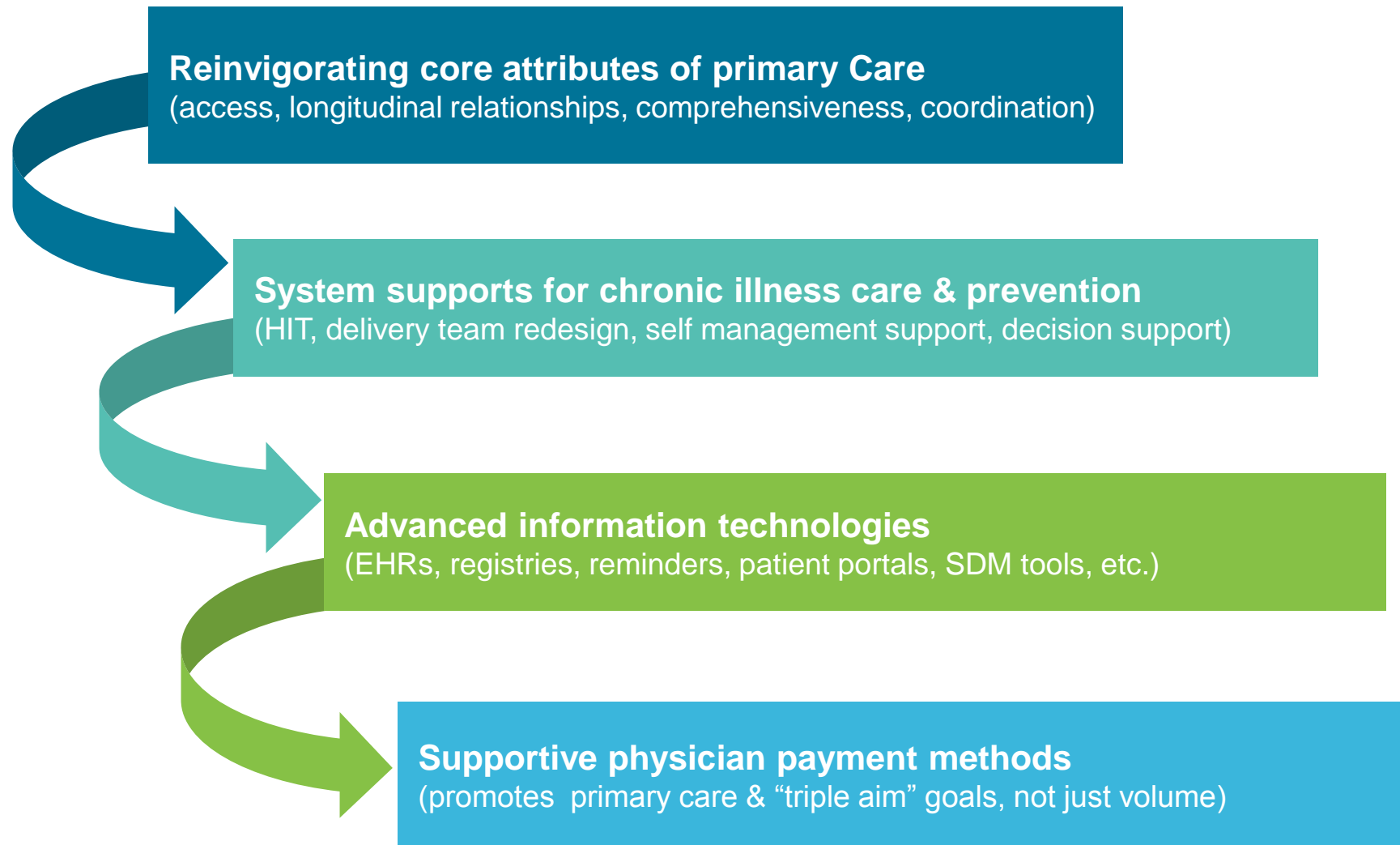- Areas with higher primary care supply have lower costs

Better Equity
- Primary care mitigates the adverse health effects that come with social disadvantage

In US & Canada, **Patient-Centered Medical Home (PCMH)** has emerged as the vehicle to rapidly reinvigorate primary care

PRIMARY CARE IS A TEAM SPORT

WHAT IS THE PATIENT-CENTRED MEDICAL HOME?

Reinvigorating core attributes of primary Care
(access, longitudinal relationships, comprehensiveness, coordination)

System supports for chronic illness care & prevention
(HIT, delivery team redesign, self management support, decision support)

Advanced information technologies
(EHRs, registries, reminders, patient portals, SDM tools, etc.)

Supportive physician payment methods
(promotes primary care & "triple aim" goals, not just volume)

PATIENT-CENTREDNESS

- Growing body of evidence that **patient & family engagement** is associated with **higher quality at same or lower cost** (Cosgrove, et al. 2103; Green and Hibbard 2012; Hibbard, et al. 2013)

- PCMH seeks to engage patients & families in ways that matter to them

WHAT DOES PATIENT-CENTREDNESS MEAN?

Core Concepts:

- **Dignity & Respect** - Providers listen to & honor patient/family perspectives & choices. Values, beliefs & cultural backgrounds are incorporated into care

- **Information Sharing** - Providers communicate & share complete/ unbiased information in ways that are affirming and useful. Patients and families receive timely, complete, and accurate information

- **Participation** - Patients & families are encouraged & supported in decision-making at the level they choose

- **Collaboration** - Patients & families collaborate in policy & program development, care delivery design, implementation, & education

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www.ipfcc.org

LESSONS FROM AN INTEGRATED SYSTEM: GROUP HEALTH'S MEDICAL HOME JOURNEY

ABOUT GROUP HEALTH…

- Integrated healthcare insurance & delivery system
- Revenues (2013): $3 billion
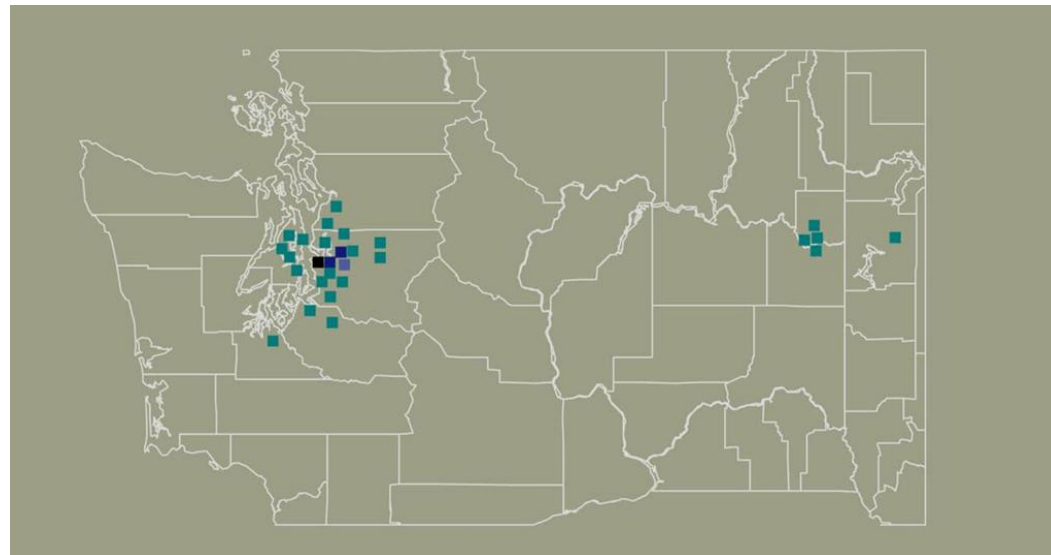- ~ 600,000 patients & 10,000 staff

Multispecialty group practice
- ~1,000 physicians
- 26 primary care
- 6 specialty units

Contracted network
- >9,000 providers, 39 hospitals

Group Health Research Institute
- $48 million (2013), 60 scientists
- >250 active grants

SOME HISTORY…

Primary care emphasized from origins, but by mid-2000's, infrastructure was weakening & underperforming

- ➤ Loss of efficiency with EMR implementation

- ➤ "Advanced access" brought increased visits but greater total cost of care (more ER visits, more specialty visits, more admissions)

- ➤ Decreasing quality performance

- ➤ Significant burnout with loss of staff

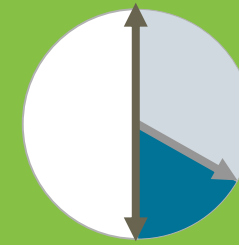- ➤ Decreasing patient satisfaction

GROUP HEALTH'S MEDICAL HOME

Structural Changes:

MD Panel size

2,300 → 1,800

Appointments

30 min.
↑
20 min.

Enhanced & co-located Teams

"Desktop" medicine time

Value-based payment incentives

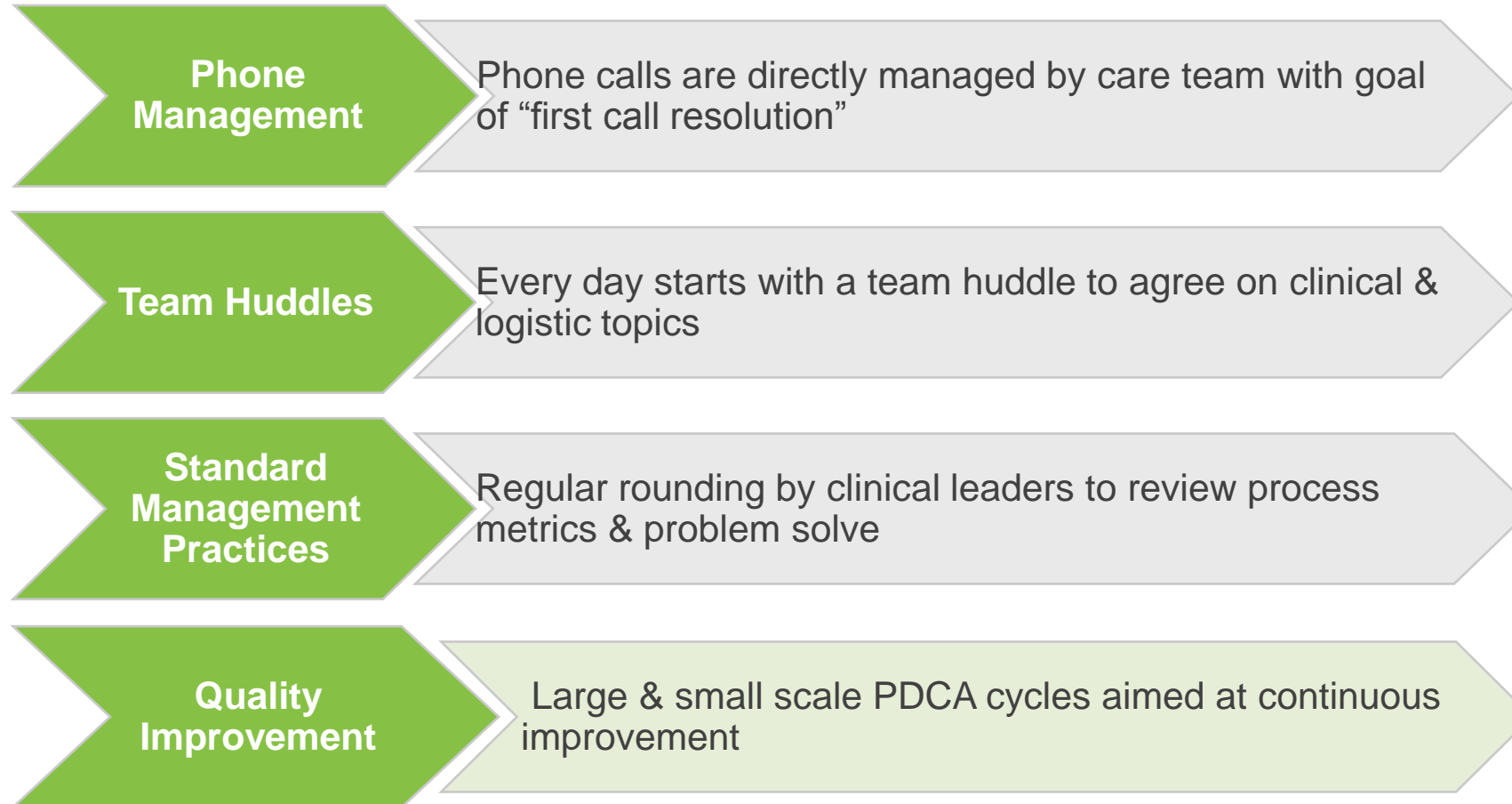# GROUP HEALTH'S MEDICAL HOME

4 Key Changes to Process of Care

Virtual Medicine

From: most visits are in person

To: patients can easily access by email, phone

Care Management

From: chronic care is inconsistent & reactive

To: chronic care is consistent, coordinated, and proactive

Visit Preparation

From: unprepared & reactive approach to visits

To: time maximized by efficient preparation

Outreach

From: uncoordinated, retrospective, & insufficient

To: prospective outreach on care gaps & sentinel events

GROUP HEALTH'S MEDICAL HOME

4 Key Enhancements to Practice Management

Phone Management
Phone calls are directly managed by care team with goal of "first call resolution"

Team Huddles
Every day starts with a team huddle to agree on clinical & logistic topics

Standard Management Practices
Regular rounding by clinical leaders to review process metrics & problem solve

Quality Improvement
Large & small scale PDCA cycles aimed at continuous improvement

EVALUATION OF GROUP HEALTH'S MEDICAL HOME

Reid RJ et al, Health Affairs 2010;29(5):835-43
Reid RJ et al, Am J Manag Care 2009;15(9):e71-87

Medical Home Components (⇧)
- Year 1: 94% more emails, 12% more phone consultations, 10% fewer calls to consulting nurse, & other changes
- Year 2: Changes persisted

Patient Experience (⇧)
- Year 1: small, statistically significant changes in 6/7 scales including access, quality of MD interactions, care planning
- Year 2: Changes persisted in 5/7 scales

MD & Staff Burnout (⇩)
- Year 1: Emotional exhaustion dropped by half at medical home with no change in controls.
- Year 2: Changes lessened but remained significant

Downstream Utilization (⇩)
- Year 1: 29% fewer ER visits, 11% fewer preventable hospitalizations, 6% fewer but longer in-person visits
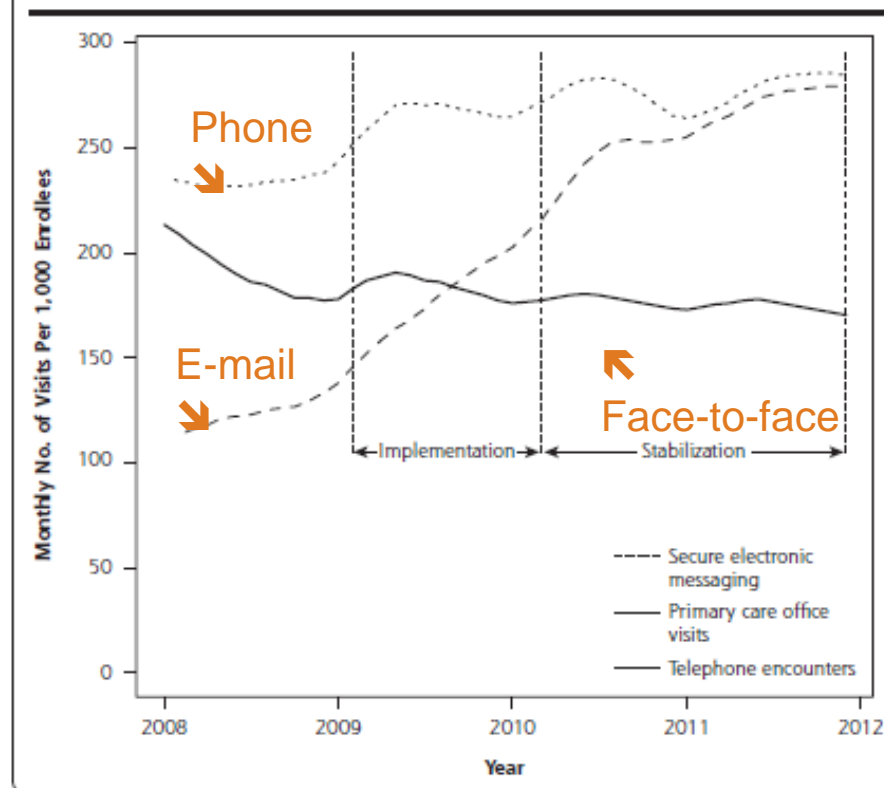- Year 2: Significant changes persisted

Costs (⇔ or⇩)
- Year 1: No significant difference in total costs between patients in prototype and control clinics
- Year 2: Lower patient care costs approached stat significance in prototype (~$10 PMPM; p=0.08)

Reid RJ, Johnson EA, Hsu C, et al. Ann Fam Med 2013;11:S19-S26

Some Medical Home Learnings….

- Clinical workflows must be redesigned to accommodate shift towards "virtual care"
    - Scheduled phone visits
    - Secure messaging
    - Outreach activities

- Tasks must be distributed among team members to maximize skills and efficiencies
    - More meaningful use of medical assistants and lay health workers
    - Professional staff working to "top of licensure" (physicians, pharmacists, nurses)
    - Use patient segmentation approaches to match service intensity with risk/need

- Work interdepencies requires dedicated focus on improving team work
    - Clearer delineation as to who "is on the team" and how they work together
    - Focus improving accuracy and timeliness of interteam communication

Relational Coordination Theory

Some final reflections…

- The patient voice is potent and a catalyst for change

- Information exchange is only step one; redesigning workflows to effectively use information is step two.

- Information exchange is needed between and within care teams.

- Effective team work involves informational and relational dimensions

- Patient-facing HIT technologies are a key to the future

- Clinical leadership and change management is essential

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