Taking Innovation to Scale in the Private Sector:
The Kaiser Experience

Scott Young, MD

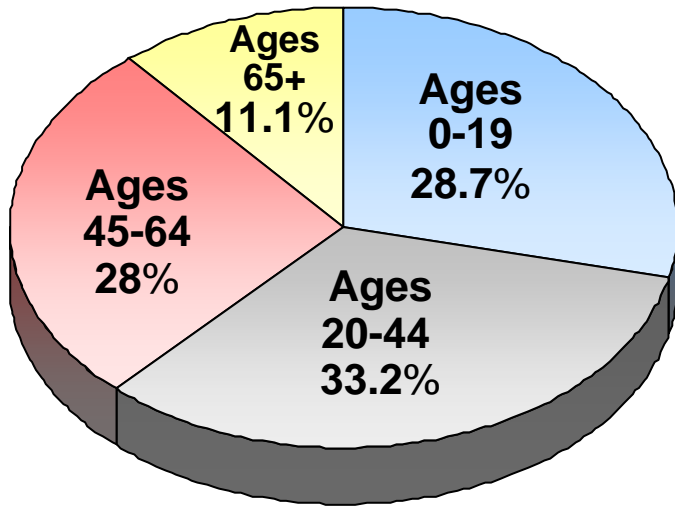**June 1, 2009**

About Kaiser Permanente

- **Nation's largest nonprofit health plan**
- **Integrated health care delivery system**
- **8.7 million members**
- **13,000+ physicians**
- **28,000+ nurses**
- **156,000+ employees**
- **Serving 9 states and the District of Columbia**
- **32 hospitals and medical centers**
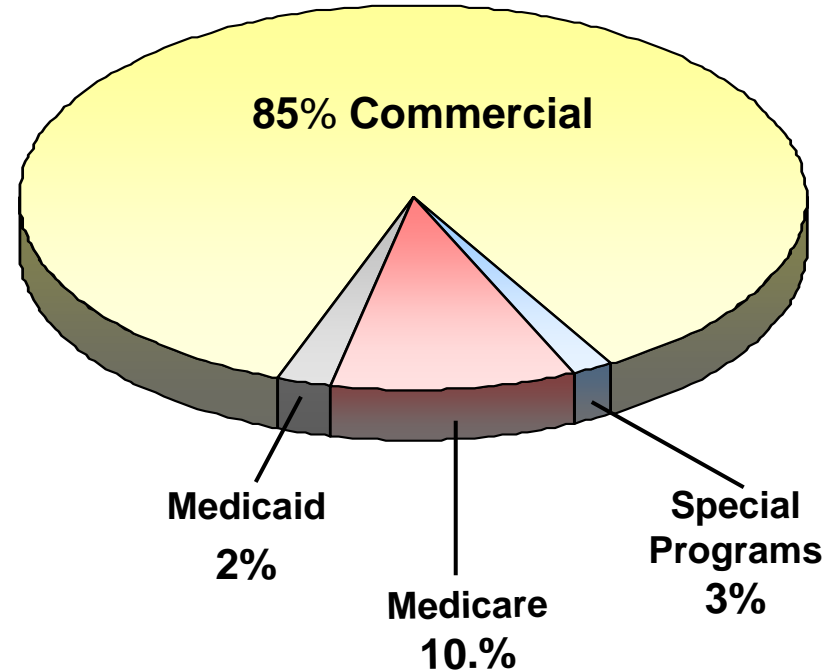- **416 medical offices**
- **$34.4* billion annual revenues**
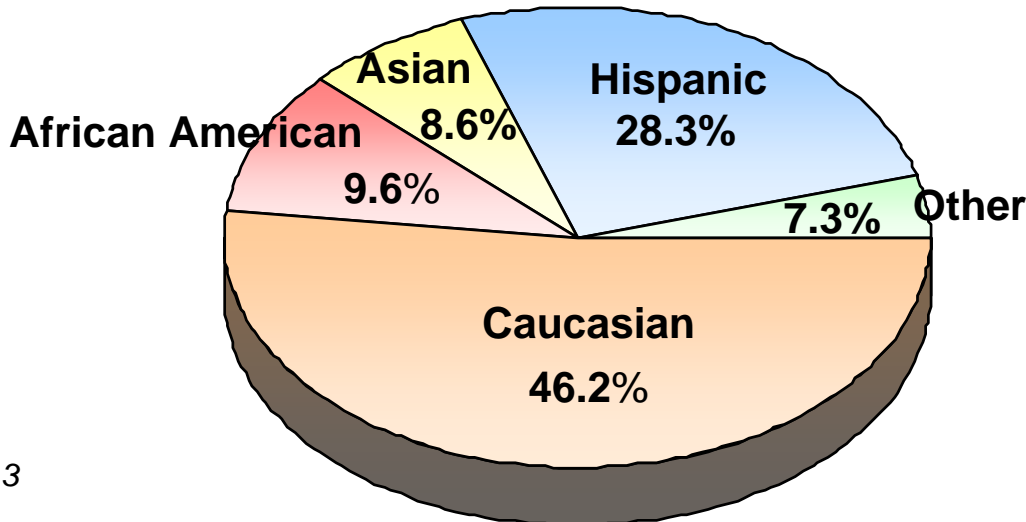

* 2006 revenues

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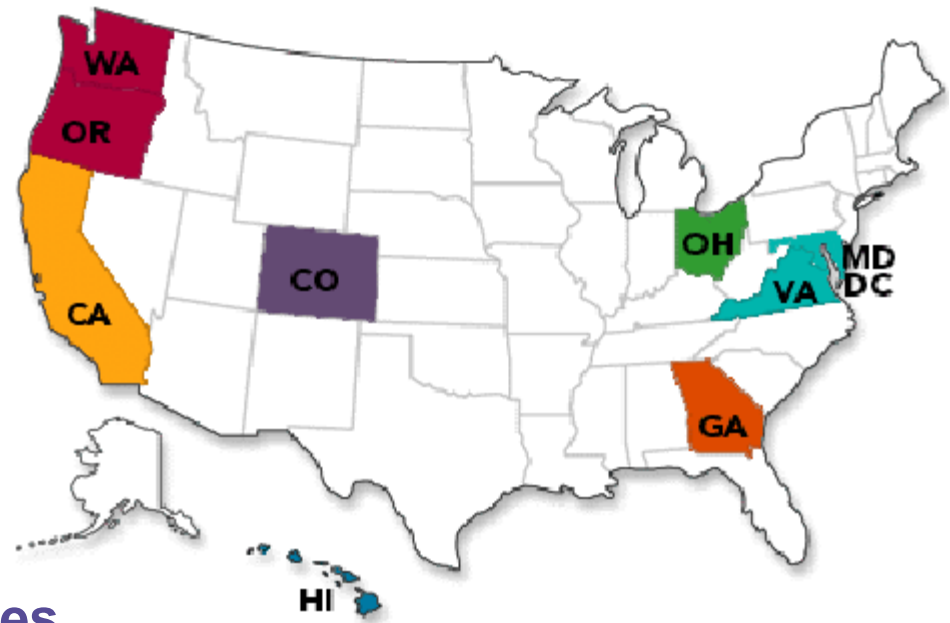
Who Are KP Members?

Membership by Age

Ages 65+ 11.1%

Ages 0-19 28.7%

Ages 45-64 28%

Ages 20-44 33.2%

Membership by Coverage Type

85% Commercial

Medicaid 2%

Medicare 10.%

Special Programs 3%

Membership by Ethnicity Type

Asian 8.6%

Hispanic 28.3%

African American 9.6%

Other 7.3%

Caucasian 46.2%

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Developed in 1997 as a national KP organization jointly funded and managed by the Health Plan and the Permanente Medical Groups.

Mission: "*Making the right thing easier to do.*"

1. *Identify the right things*
   - Evidence-based medicine
   - Measurement
   - Successful practices

2. *Make the right things easier*
   - Focus on the delivery system
   - Technology to support effective work
   - Networks of individuals and groups

Initial focus was in the development of "world class" clinical practice guidelines for the organization and provide a laboratory for interesting clinical delivery problems. Over time, CMI began to be less relevant to the operations – "an academic organization". It was time to change…

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Data in our Electronic Medical Record enables:

- Direct patient care, documentation, and communication
- Communication with our Members
- Population Management
- Decision Support
- Panel Management and Performance Reporting
- Automated outreach
- Health Information On-Line targeted to patient health history and preferences
- Biomedical Device Integration

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KP HealthConnect by the Numbers

- All 8.7 million members have the benefit of a complete or partial KP HealthConnect record
- Ambulatory EMR available to all care teams
- 23 hospitals deployed end-to-end with complete KP HealthConnect suite serving 4.8 million members (the most hospitals using electronic medical records of any civilian hospital system in the nation)
  - Integrated inpatient-outpatient record available
  - All remaining hospitals have non-clinical applications implemented
  - Full clinical deployment in existing and new hospitals expected by early 2010
- 135,000 active users
- 75,000 concurrent users daily
- 36 million records stored
- 35 millions scanned documents stored
- More than 2.3 million members actively using *My health manager* on kp.org

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KP.ORG

KP HealthConnect allows members to send secure email, review lab results, medication lists, and other personal medical information via KP.org using a secure and password-protected Internet connection. At any time, day or night, members can schedule or cancel appointments, pay bills, request medication refills, and ask for referrals. Members' personal health information will be seamlessly integrated into KP.org to help them better understand the care they're receiving - and build a stronger relationship with their KP providers.

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KP Clinical Content

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- Access to library of KP knowledge and best medical practices at the point of care

- Tools and templates that facilitate the delivery of evidence-based medicine

- Dynamic decision-support tools that enhance quality and patient safety

  - Drug-Drug Interactions Alerts
  - Drug Allergy Alerts
  - Best Practice Alerts
  - Health Maintenance Reminders
  - Alternative Order and Medication Alerts

- Patient education and tools to support self-care

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Chronic Care and Population Care: Total Panel Management

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How can we reduce avoidable inpatient care by improving care delivery to our most vulnerable members?

Current Care Delivery Improvement Initiatives

Palliative Care
Quality of Life

Care Transitions
Care Integration & Patient Empowerment

4C
Resource Intensive Members

Avoidable Hospitalization

- Respect patient values and choices for care setting at EOL
- Anticipate potential causes of re-admission before they occur
- Provide the support our most vulnerable members need to stay out of the hospital

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Transitions – Hospital to home or next setting of care

- Across KP, 13.8% of discharged patients are readmitted within 30 days
  - Which means that ~13.8% of admissions are readmissions

- Readmission is much more than an expense – for our patients it is often a disaster
  - Infection
  - Medication error
  - Planned follow-up not delivered

- Risk factors
  - Comorbidities
  - Intensity of current hospitalization and procedure
  - Lack of follow-up on tests
  - No physician visit 5-10 days after discharge
  - Home and social factors (i.e. lack of caregiver support)

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Transitions Improvement - SCAL

- **Example:**
  - **Transitions Care Program (TCP)**
    - Region-wide program in SCAL
    - Focus on HF Transitions
    - Key Clinical Interventions
      - Heart Failure Nurse assessment in the Hospital
      - Home Health visit within 48 hours
      - Out-patient Heart Failure Clinic follow up.
  - **Early 2008 SCAL began a region-wide effort to improve program reliability and performance**

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Chart review and patient interview drill beyond proximate reasons for readmission, asking: Why? Why? Why?

Case study

Issues identified	Solutions tested
Actos prescribed incorrectly (5 cases)	Physician lead is educating team
Gaps in patient understanding of diet for CHF	Path identified for improving referral process to dietician
Unmet patient social service and psych support needs	Improving social worker assessment and further leveraging social worker across the program

Upon readmission, patient explained:
"I didn't understand exactly what was meant by 'fluid' so I had been taking in too much liquid. And during my visit with the Home Health nurse I did not have an adequate explanation of my medications."

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Transitions Improvement – Learning

We supported regional demonstrations, conducted over 200 interviews with members and staff in 3 regions, created 100's of ideas for prototyping and field tested over 30 prototypes

We learned many things:

- Providers are overly focused on the hospital setting. Home is where the "transition" actually happens
- Provider accountabilities and roles during transitions are unclear
- Transitions systems are not reliable
- We can better meet our patient needs for:
  - Follow-up care
  - Information about what to do and expect at home
  - Medication management
  - Caregiver support
  - Appreciating what matters to them

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4C – Current Situation

- **Ohio: Advanced Care Panel (ACP)**
    - Use a Predictive Model to ID patients at highest risk for hospitalization
    - MD led multidisciplinary team (MD, RN, SW, PharmD) provide home-based care
    - Small Panel sizes (125-175 members)
    - Intervention includes excellent transitions, advanced care planning, meeting psych-social needs, medication management, proactive outreach.
- **Hawaii: Special Care Initiative (SCI)**
    - Multidisciplinary specialty team (MD, SW, RN, PharmD) provide care to a small panel of complex patients.
    - Provide consultation and support to PCP in clinic
    - Enroll patients with DM+HF+CAD with high utilization.
    - Intervention includes proactive telephonic outreach, telemonitoring, advanced care planning.
- **Northwest KP Cares**
    - Multidisciplinary team (MD, NP, SW, PharmD, PT) manage frail elders across a continuum of care including home, SNF, adult foster care homes and ALF.
    - Intervention includes frequent proactive outreach by visits or phone, comprehensive assessment.
- **Georgia CVD**
    - Identified RIM patients using predictive model in CVD program and other care management programs.
    - Enrolled highest risk patients first

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- **Designing and testing new models of care takes time, patience and attention to detail.**

- **Finding the right people for the intervention is harder than we thought.**

- **Balancing the cost of the intervention with the size of the target population is tricky. It's hard to identify the "top 1%", and it's expensive to intervene on too many people.**

- **We need to continue our work and validate an approach that works**

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We have adapted our plans for 2009 to increase focus on near-term results

	Proposed 2009 Approach
Palliative Care	• **Strengthen IPC programs – Process improvement, team skills, training & education** • **Support implementation across continuum (ambulatory, home-based, SNF)** • **Support development of KPHC tools**
Transitions In Care	• **Conduct a comprehensive demonstration site to identify process improvements, test key components and member-centered tactics**
4C	• **Continue to support improving program innovation, performance**
All Initiatives	• **Performance measurement** • **Evaluation**

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Thank You