From Patient to Productivity

Effectiveness of Evidence-Based Guidelines in the Clinical Environment

Steve Wiesner, MD
National Integrated Disability Management (IDM) Physician Advisor
Kaiser Permanente

Joe Guerriero
Senior Vice President, MDGuidelines
Reed Group, Ltd.

Martha Garcia
Senior Program Manager
Kaiser Permanente
Agenda

• Helping Patients Return to Productive Lives: The Importance of Clinical Guidelines
• Using Guidelines in the Clinical Setting
• Measuring Performance
• How Guidelines fit into Kaiser Permanente’s Vision and Strategy
• Applying Learnings from Occupational Health to Population Health
Helping Patients Return to Productive Lives: The Importance of Clinical Guidelines
Practice Guidelines Support Clinical Decision-Making

- Based on ACOEM (American College of Occupational and Environmental Medicine) evidence-based recommendations
- Clinical content for prevention, diagnosis, prognosis, follow-up, and treatment
- Physician-supported patient education
- Integrated with Disability Duration Tables
Disability Duration Tables Inform Transitional Activity Progression

Benchmark Cases Against Normative Data

- Based on more than 5 million observed cases collected and reviewed by clinical professionals
- Reflects Medical and Non-Medical (Psychosocial) Factors

Manage Cases to Physiological Duration Tables

- Reflects physiological healing times determined by Medical Advisory Board
- Excludes Non-Medical Factors
Predictive Modeling Tools Refine Duration Estimates

- Helps refine duration estimates with demographic data (e.g. age, gender, job class, geography) and co-existing medical conditions

- Model continually improves based on increasing Reed Group normative data set
Why Return-to-Productivity Matters

There is a large and growing body of scientific evidence that return-to-work usually provides significant overall health benefit, and staying off work needlessly results in poorer overall health outcomes.

Employers, employees (patients), and insurers all benefit from individuals returning to work in usual time periods.

— James B. Talmage, MD  
(Author of AMA Guides to the Evaluation of Work Ability and Return to Work)
Using Guidelines in the Clinical Setting
Major Milestones – Kaiser Permanente’s Implementation of ARx / MDGuidelines

2008  • Physician needs-assessment to identify disability-related tools and resources

2009  • Development of Activity Prescription Form (ARx) begins
       • Contract with Reed Group to enable physicians’ access to MDGuidelines from ARx

2011  • Initial rollout of ARx with MDGuidelines in NCAL and SCAL regions
       • Provide clinicians with training on core disability concepts

2012  • Completion of ARx/MDGuidelines rollout in 5 remaining Kaiser Permanente regions

2014  • Engagement with Reed Group to benchmark clinical use of MDGuidelines

2015  • Identify stakeholders and resources for obtaining data for analytics
       • Review data values captured by Kaiser Permanente using the ARx
       • Share de-identified aggregate data of top diagnoses with Reed Group
       • Review data analytics and findings
Generating Internal Awareness and Adoption of Guidelines

- Provide all clinicians access to ARx with embedded MDGuidelines
- Integrated care delivery allows for access via the electronic health record
- Provide web-based disability management training, “Clinician Resources for Work Disability Prevention and Management”

HealthConnect Activity Rx Tool used to Document Disability

MD training resources developed by Kaiser Permanente-IDM
Activity Prescription Form (ARx): Kaiser Permanente’s Electronic Disability Documentation and Communication Tool
Activity Prescription Form (ARx): Kaiser Permanente’s Electronic Disability Documentation and Communication Tool
Kaiser Permanente’s ARx Represents Groundbreaking Use of Disability Guidelines

Kaiser Permanente’s launch of ARx with embedded MDGuidelines was the healthcare industry’s first large-scale, EHR-based integration of disability duration tables delivered at the point of care.
Managing the Disability Program Across Regions

- Each Kaiser Permanente region has an IDM Physician Advisor who supports local personnel in addressing disability management, oversees disability management education, and coordinates implementation of ARx/MDGuidelines.

- Bi-monthly meetings occur with all regional IDM Physician Advisors to share best practices and address disability management issues.

- The team tracks key metrics associated with the disability management program:

<table>
<thead>
<tr>
<th>Region</th>
<th>Initiation</th>
<th>Implementation</th>
<th>Usage</th>
<th>Generation and Analysis</th>
<th>Education</th>
<th>Overall Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern California</td>
<td>Garner senior-level support to move forward on possible DDG/ARx implementation.</td>
<td>Implement DDG/ARx application into Health Connect platform.</td>
<td>Roll-out application for use by all departments/MDs.</td>
<td>Post implementation, generate and analyze data.</td>
<td>Provide training and education for current DDG/ARx end-users to ensure appropriate and accurate use.</td>
<td>3.6</td>
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Measuring Performance
Benchmark to MDGuidelines Normative and Optimum Durations (Select Diagnostic Categories)

*Kaiser Permanente NCAL Occupational Health Cases*

Disability Days

- Diseases of the Musculoskeletal System and Connective Tissue (710-739)
- Diseases of the Nervous System and Sense Organs (320-389)
- Diseases of the Skin and Subcutaneous Tissue (680-709)

**Major Diagnostic Category**

- Avg of MDG Normative Duration
- Avg of 2012 - 2013 Kaiser Permanente claims
- Avg of MDG Physiological Optimum Duration
Benchmark at the Subcategory Level (Category *Diseases of the Musculoskeletal System*)

IBI Annual Forum - February 17, 2016
Top Five Diagnostic Groups With Largest Variance from Clinical Optimum

2013 Breakdown of Temporary Total Disability (TTD) vs Modified Duty (MD)
Diagnostic Groups Where Kaiser Permanente is Exceeding Clinical Optimum (2011-2013)

![Bar chart showing disability days for different diagnostic groups over three years.](chart.png)
Key Findings

• Kaiser Permanente’s durations were typically lower than MDGuidelines’ normative data set (5M+ cases of observed data).

• On average (2012-2013), Kaiser Permanente NCAL Occ Health outperformed the MDGuidelines normative data set by \textbf{350,121 days} per year ($\textbf{30 million}$ value).
  
  – An incremental \textbf{12,349 days} per year (approximately $\textbf{1.05 million}$) could be saved if all modified duty cases returned to full duty within the normative duration.

  – Areas of opportunity include: knee, foot, hand and arm injuries as well as hernia and depression (ICDs 296.2, 550.9, 553.1, 813.05, 815, 824.8, 825.2, 825.25, 836, 836.1, 836.6, 844.2)

Cost estimates are based on 75% of IBI’s projection of $114/day for Wages, Benefits and Lost Productivity for modified duty work days. These cost estimates are based on IBI’s Full Cost Estimator tool using input values to reflect California wage and employment values from the Bureau of Labor Statistics May 2014 and California as the reference state for workers’ compensation costs. Estimates do not include reduced healthcare utilization costs.
How Guidelines fit into Kaiser Permanente’s Vision and Strategy
Kaiser Permanente Overview

Founded in 1945, Kaiser Permanente is one of the nation’s largest not-for-profit health plans, with 177,445 employees serving 10.1 million members.

Kaiser Permanente is made up of three separate, but closely cooperating, organizations: *Kaiser Foundation Hospitals, Kaiser Foundation Health Plan, Permanente Medical Groups*

- 38 Hospitals
- 619 Medical Offices
- 17,791 MDs
- 49,778 RNs
Integrated Approach to Care Delivery

Data-driven

Proactive

Team-based, physician-led

Systemwide

Comprehensive

Patient-centered
Kaiser Permanente’s Value Proposition

Deliver on the promise of integrated healthcare delivery & active productivity management, by aligning products & services that improve workforce health & productivity along the full spectrum of well-being and intervention.

- Less fragmentation = less cost, better clinical outcomes, earlier RTW
- Program elements integrated and complimentary = synergized and compounded impacts to workforce health
- Less administrative cost for employers
- Kaiser Permanente Integrated Care Delivery System provides members best health and wellness

Integration of service and program component data provides a unique opportunity to measure and report on the impact on total workforce health and productivity.
Kaiser Permanente’s “Total Workforce Health” Vision as part of the Strategic Customer Engagement

Kaiser Permanente will improve member satisfaction and support our commercial health plan customers by reducing the duration & total cost of employee disability through efficient administrative processes, responsive and best-in-class clinical tools, reporting, & analysis.

Direct vs. Indirect Costs

Direct Medical Costs
- Medical
- Pharmaceutical

Indirect Costs
- Presenteeism
- Short Term Disability
- Long Term Disability
- Absenteeism
- Workers’ Compensation

Indirect Costs represents 2-3 times Direct Medical Costs
Applying Learnings from Occupational Health to Population Health
Healthcare Market Dynamics (Pre-ACA)

Alignment of Economic Incentives

Employee
- Getting back to work sooner = more income

Employer
- Getting employee back to work sooner = increased productivity

Payer
- Getting patient back to work sooner = reduced costs

Provider
- Fee-for-service = overutilization and increased costs
Healthcare Market Dynamics (Today)

Employee  Employer  Payer  Provider

Full Alignment of Economic Incentives

ACO/IDN
**Healthcare Market Dynamics**

- **Payment Reform**: Hospitals are rapidly shifting away from fee-for-service payment models, toward value-based care models (aka pay-for-performance model or bundled payments).

- **Rapid Rise of ACOs***: Emergence of ACOs giving rise to incentivized “population health management”:
  - Accountable Care Act has spurred ACO growth (23.5M lives are now covered under ACOs)
  - ACO registrations have quadrupled since 2013
  - 85% of hospitals have ACOs or are in the ACO-planning stage
  - 136 Payers have entered into ACO contracts. The Top 5 Insurers (Aetna, BCBSA, Cigna, Humana and United Healthcare) hold more than 2,000 ACO contracts.
  - Provider / Payer partnerships = shared risk (46% partner with private insurers; 40% partner with Medicare/Medicaid)

- **Big Data and Analytics****: Hospitals increasingly using analytics and data-driven measurements to control costs and minimize risk. Focus is on large pools of data that help guide decision making.

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** Forbes. 2015-04-21, “How Big Data is Changing Healthcare”
8. Healthcare organization realizes improved outcomes, optimized utilization of services, and improved management of patient population.

7. Reed Group continually measures performance, identifying areas of improvement in helping clinicians return patients to productivity.

6. Reed Group trains physicians and care managers in the effective use of MDGuidelines.

5. Healthcare organization integrates MDGuidelines into the EHR and clinical care protocols.

1. Healthcare organization submits deidentified patient data (including disability durations) from employee population and/or occupational health departments.

2. Reed Group compares disability durations against physiological and normative benchmarks.

3. Report cards show performance at the diagnostic category and condition level.

4. Cost opportunity is identified, showing the financial impact if durations are reduced, and healthcare utilization is optimized across the patient population.

Healthcare organization realizes improved outcomes, optimized utilization of services, and improved management of patient population.

MDGuidelines – Total Health and Productivity

MDGuidelines
- Productivity Duration Tables
- Evidence-based Treatment Guidelines
- Predictive Modeling
- EHR Integration

Consultation
- Business Intelligence
- Clinical Support
- Utilization Best Practices

Analytics
- Benchmarks
- Big Data Insights
- Scorecards
- Return on Investment

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Contact Information

Steve Wiesner, MD  
National Integrated Disability Management (IDM) Physician Advisor  
Kaiser Permanente  
steve.wiesner@kp.org  
510-752-7792

Joe Guerriero  
SVP, MDGuidelines  
Reed Group, Ltd.  
jguerriero@reedgroup.com  
720-456-4387

Martha Garcia  
CA License od84548  
Senior Program Manager  
Kaiser Permanente  
martha.f.garcia@kp.org  
818-557-6093