Case Studies

Multi-Level Networks
High Tech Diagnostic Imaging Management

National Institute for Health Care Management

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Blue Cross and Blue Shield of Minnesota

An independent licensee of the Blue Cross and Blue Shield Association
Blue Cross Blue Shield of Minnesota: Overview

> 2.9 million Members
  - 1,900,00 reside inside of Minnesota

> Minnesota providers are mostly in large care systems

> Headquarters for 20 Fortune 500 companies – each advised by national benefits consulting firms
Hospital Cost Measurement

- Milliman’s “RBRVS for hospitals”
  - Inpatient services are grouped to APR-DRGs (per day)
  - Outpatient RVUs are assigned at the HCPC level rather than APC
Hospital Quality Measurement: NQF/CMS Measures – Required Threshold

- Acute Myocardial Infarction (AMI)
- Heart Failure (HF)
- Pneumonia (PN)
- Surgical Infection Prevention (SIP)
- Patient Safety Indicators (PSI)
Our Approach to Clinic Profiling

> Providers = Clinics or care systems, not individual practitioners

> Meetings with Minnesota Medical Association (MMA)*, Minnesota Academy of Family Physicians (MAFP), and large provider groups

> Rank providers based on both cost and quality

  → weighted equally

> We tiered 17 primary care and traditional medical specialties

* Provided an independent critique and published all details (methods and metrics) on MMA website
Specialties Tiered Based on Both* Cost and Quality: State-wide

> Primary Care
  - Family practice
  - Internal medicine
  - General practice
  - Pediatrics
  - Obstetrics/gynecology

> Medical / Surgical
  - Geriatrics
  - Oncology / hematology
  - Otolaryngology
  - Pulmonology
  - Rheumatology
  - Allergy & immunology
  - Preventive medicine
  - Ophthalmology

* A smaller subset of specialties have no standardized quality metrics and are tiered on risk-adjusted cost alone. A few specialties are exempted from tiering, e.g., anesthesiology, where patient choice is not usually exercised.
Clinic Profiling Methodology

Currently using Blue data only, not all-payer

> Quality
  – Evidence-based measures based on NQF, AQA, and HEDIS specifications
  – 32 quality measures

> Cost
  – Episode Treatment Groups (ETGs) as a measure of cost
  – Multivariate regression modeling was run on each ETG to derive expected cost.

> Definitions and results are transparent

> Specifications explained for minimum sample sizes, attribution, outliers, reconsiderations, data refresh intervals
Statistical Adjustments: Expected Costs

> Adjust ETGs for differences in demographic, clinical, and benefit variables:
  - Age
  - Physician specialty (generalist, specialist, multi-specialty group)
  - Median household income, based on census block group of residence
  - Gender
  - Complication
  - Surgical procedure
  - Hospitalization
  - Medication burden - # of unique medication types each patient receives
  - Anatomic location of injury (esp. useful for orthopedic ETGs)
  - Pharmacy benefit
  - Comorbidity score (Charlson)
Utilization Information for Providers

Inflammation of the Intestines and Abdomen

Average Number of Services

Utilization Category

- Inpatient Facility (R&B)
- Advanced imaging - CAT/CT/CTA (e.g. diagnostic colonographies)
- Major Procedure - other
- Lab tests - other
- Office visits - established
- Consultations
- Minor procedures - other

Provider A  Multispecialty providers
Clinic Quality and Efficiency Ranking

The clinic tier line was adjusted to create two networks that will address two degrees of purchaser acceptance of disruption.

Achieve

Perform
2007 Savings for Large National Employer

Blue Precision Perform Network Savings
$1.2 Million Savings compared to 2006:
Where Does it Come from?

Percent of Savings

- Cost Shift to Member Max during first year
- Change from Level 2 to Level 1 Providers

This increases year over year
High Tech Diagnostic Imaging
A new approach to support the ordering of appropriate high-technology diagnostic imaging (HTDI) procedures

> The approach consists of a common set of HTDI appropriateness criteria that would be:

– Available in the physician’s office to provide clinical decision support \textit{at the time care is being discussed with the patient and prior to ordering HTDI tests}

– Embedded into an electronic medical record (EMR), or made available via web site

– Continually updated and expanded as evidence and guidelines evolve (excludes tests or procedures Blue Cross Medical Policy considers investigational)
# Background

**ICSI**

A 15 year-old collaborative in Minnesota

Multiple payers and providers

## List of the Key Events/Dates re: HTDI

<table>
<thead>
<tr>
<th>Month</th>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>Fall</td>
<td>2005</td>
<td>ICSI convened an informal group of health plans and medical groups to explore issue of HTDI</td>
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<tr>
<td>Winter</td>
<td>2005</td>
<td>ICSI informal group of health plans and medical groups disbanded</td>
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<td></td>
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<td>Health plans are mandated by the legislature to implement PA</td>
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<td>September</td>
<td>2005</td>
<td>or “otherwise use evidence-based practices to address these services” for public programs</td>
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<td>July</td>
<td>2006</td>
<td>Medica started PN/PA pilot with a few medical groups</td>
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<td>Fall</td>
<td>2006</td>
<td>Medical groups approached ICSI to re-examine issue</td>
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<tr>
<td>Fall</td>
<td>2006</td>
<td>HTDI Steering Committee formed at ICSI</td>
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<td>January</td>
<td>2007</td>
<td>Medica and HealthPartners implemented PN</td>
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<tr>
<td>February</td>
<td>2007</td>
<td>HealthPartners Medical Group implemented an alternative solution</td>
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<tr>
<td>March</td>
<td>2007</td>
<td>Fairview Health Services implemented an alternative solution</td>
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<tr>
<td>March</td>
<td>2007</td>
<td>Medica began denying claims for failure to prior notify</td>
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<tr>
<td>April</td>
<td>2007</td>
<td>Allina Medical Clinic implemented an alternative solution</td>
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<tr>
<td>June</td>
<td>2007</td>
<td>SMDC and Park Nicollet implemented an alternative solution</td>
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<tr>
<td>July</td>
<td>2007</td>
<td>BCBS implemented PN</td>
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<tr>
<td>September</td>
<td>2008</td>
<td>ICSI’s HTDI Steering Committee receives Board approval for alternative solution</td>
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<tr>
<td>October</td>
<td>2008</td>
<td>Health plans notified their PN/PA vendors of contract termination</td>
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<tr>
<td>January</td>
<td>2009</td>
<td>Planned go live for alternative solution</td>
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PN = Prior Notification  PA = Prior Authorization
Background

> The HTDI approach was developed at the request of ICSI member provider groups and health plan sponsors to provide another option to prior notification or authorization of elective out-patient HTDI procedures

> This option was developed by ICSI’s HTDI Steering Committee, which is comprised of representatives from provider groups, health plans, and the Minnesota Department of Human Services.

> Based on an ICSI pilot project by five Minnesota medical groups

  – Provider groups and health plan sponsors determined that the pilot demonstrated that this was an efficient, patient-centric model that was preferred over vendor-provided prior notification or authorization processes
ICSI Board-approved Actions

ICSI will assemble and facilitate the following groups to assure the smooth operation of this program and continual refinement of appropriateness criteria:

> **ICSI HTDI Steering Committee** will oversee the work of these groups, monitor the program’s overall operation, and evaluate its effectiveness.

> **Appropriateness Criteria Work Group** consisting of clinical experts participating in the HTDI initiative will review criteria, literature and utilization on specified codes. Feedback on how the appropriateness criteria can be improved will be provided to the HTDI appropriateness criteria vendor.

> **Learning/Networking Collaboratives** will support the implementation and ongoing maintenance of the HTDI option through educational sessions, collaborative meetings, networking calls and/or Webinars.

> **Outcomes Data Collaborative** will analyze/review radiology utilization and outcomes data to determine how it correlates with patient outcomes.
Each Participating Health Plan is responsible for paying vendor its allocated share (much smaller than two prior years fee to outsourced vendor). ICSI will also play the role of the representative of the Health Plans vis-à-vis vendor.
Each Participating Health Plan would be responsible for providing incentive to its providers to support use of the Collaborative Option.
Each Participating Health Plan, User and Radiology Rendering Provider would be responsible for developing HL7 connection to ICSI to send and receive their own data. ICSI will provide aggregate data to the Steering Committee, work groups and collaborative members.
Aggregate HTDI Utilization Rate per 1,000 Members, 1Q03-2Q08
Aggregate Data Include: BCBS, HealthPartners, Medica, UCare and DHS
Claims and Membership Data (Hospital Inpatient and ER Claims Excluded)

*Membership profile differs across health plans.
**Only members affected by the health plan’s HTDI initiative are included in this
Questions