WHO WE ARE

OUR MISSION IS TO PROMOTE APPROPRIATE, SAFE, AND AFFORDABLE HEALTH CARE SERVICES

35,000,000
Covered lives

46
Health Plans (Including Provider-owned plans)

200+
Employer Groups

4.5 million
Case reviews per year

330,000
Ordering Physicians

Founded
1989
(Acquired by WellPoint in 2007)

Corporate Office
Chicago, IL

Contact Center Sites
Deerfield, IL
Westchester, IL
Glendale, CA

Employees
1,139
Provider Interaction

**Referral Specialist or ProviderPortal**
- Verifies member eligibility, and provider network participation
- Conducts initial review using clinical scripts
- Case approved or passed to Registered Nurse

**Nurse Reviewer**
- RN reviews case and calls out to provider office for additional information if needed
- RN uses Clinical Guidelines and nursing experience to either approve case or forward to MD reviewer

**MD Reviewer**
- MD uses clinical experience and Clinical guidelines
- MD calls out for peer-to-peer conversation
- Renders outcome:
  - Approved
  - Denied
  - Withdrawn
  - Redirected

Criteria Met → Criteria Met → Outcome

Health Plan Systems
(e.g. database, medical management systems, etc.)

Reporting
## AIM PROGRAM IS EFFICIENT WITH CLINICAL REVIEWED COMPLETED WITHIN MINUTES

### Call Center Performance
- **Average Speed of Answer:** 14 seconds
- **Abandonment Rate:** 0.6%

### Web Capabilities
- 60% of requests received via the web
- 50% of cases are closed on the web

### Provider Satisfaction
- 96% provider satisfaction rating in 2013
- Consistent with ACR/RBMA Best Practice Guidelines
- 96% of cases closed in 24 hours; 94% on the same day

### Accreditation
- URAC accreditation for health utilization management
- NCQA utilization management certification
- ISO/IEC 27001 certification (HITECH IN 2014)
AIM GUIDELINES HAVE BEEN ACCEPTED BY THE NATIONAL GUIDELINES CLEARINGHOUSE

- Be based on a systematic review of the existing evidence
- Be developed by a knowledgeable, multidisciplinary panel of experts and representative from key affected groups
- Consider important patient subgroups and patient preferences, as appropriate;
- Be based on an explicit and transparent process that minimizes distortions, biases, and conflicts of interest;
- Provide a clear explanation of the logical relationships between alternative care options and health outcomes, and provide ratings of both the quality of evidence and the strength of recommendations; and
- Be reconsidered and revised as appropriate when important new evidence warrants modifications of recommendations.
Focus

- Chartered expert panels
- Special panels convened when appropriate
- Continually monitor legal and Regulatory changes
- Academic affiliations
- Access to claims data
- Focus on continuum of imaging

Result

- Access and engage experts
- Ability to rapidly address changes across a population
- Alignment with MCP
- Active research agenda
- Analyze impact of guidelines
- Advance beyond transactional models
OBJECTIVES

TRENDS IN COMMERCIAL UTILIZATION OF ADVANCED IMAGING

- Provide insight into self-referral patterns
- Provide results of a recent review of self-referral patterns in California in practices under utilization management
- Provide results of a study regarding the impact of pre-authorization (Quality Improvement) in the Medicare Advantage population
SELF-REFERRAL PATTERN IN CENTRAL STATES

Objective
- Examine imaging utilization patterns across different medical specialties

Scope
- Commercially-insured population across Indiana, Kentucky, Missouri, Ohio, and Wisconsin were evaluated for the 12-month period between January 2012-December 2012

Results
- Self referring physicians ordered 27% of high tech imaging studies.
- Cardiology was identified as the specialty with the highest rate of technology ownership with 46% of cardiac imaging requested by self-referral physicians.
SELF-REFERRAL STUDY II

GOAL WAS TO IDENTIFY TRENDS IN SELF-REFERRAL ACROSS SPECIALTIES

OBJECTIVES

- Provide statistical analysis to evaluate the impact of removing self-referring privileges
- Determine imaging utilization variances between self-referral and non-self referral ordering physicians
- Evaluate total amount of imaging utilization controlled by self-referral physicians
- Compare trends, utilization and cost across different specialties

SCOPE

- Base analysis on single geography: California
- Normalize patient population to the same risk and network constraints: Age 50 – 65, Commercial PPO
- Most recent 2 years of approved utilization data: Jan 2012 – Dec 2013, approved prior authorization requests for advanced imaging (CT, MRI, MPI, Echocardiography and PET)
- Separate ordering entities by specialties and by self-referral capabilities
## Advanced Imaging Utilization

**CA Commercial PPO**  
**Patient Age: 50 - 65**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Patients</td>
<td>704,604</td>
<td>717,679</td>
<td>2%</td>
</tr>
<tr>
<td>Total Approved Services</td>
<td>207,913</td>
<td>200,879</td>
<td>-3%</td>
</tr>
<tr>
<td>Utilization per 1000</td>
<td>295</td>
<td>280</td>
<td>-5%</td>
</tr>
<tr>
<td><strong>Self Referral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>34,363</td>
<td>32,856</td>
<td>-4%</td>
</tr>
<tr>
<td>% Of Total</td>
<td>17%</td>
<td>16%</td>
<td>-1%</td>
</tr>
<tr>
<td>Unique Patients</td>
<td>25,324</td>
<td>24,523</td>
<td>-3%</td>
</tr>
<tr>
<td>Services per Patient</td>
<td>1.36</td>
<td>1.34</td>
<td>-1%</td>
</tr>
<tr>
<td><strong>Non-Self Referral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>173,550</td>
<td>168,023</td>
<td>-3%</td>
</tr>
<tr>
<td>% Of Total</td>
<td>83%</td>
<td>84%</td>
<td>0%</td>
</tr>
<tr>
<td>Unique Patients</td>
<td>106,503</td>
<td>102,728</td>
<td>-4%</td>
</tr>
<tr>
<td>Services per Patient</td>
<td>1.63</td>
<td>1.64</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Observations:

1. **Self Referral Entities control less than 20% of total imaging utilization**  
   Hospitals purchasing physician practices and decrease in office imaging reimbursement has caused dramatic change in self referral market share.

2. **Overall trend in imaging is down, with greater decline observed in self referrals**  
   Choosing Wisely recommendations and prior-authorization oversight has caused significant decline in unnecessary utilization. Self-Referral physicians may adapt faster to guideline changes from their specialty societies or due to PQRS measures.

3. **Self Referral Physicians order fewer services per patient**

![Approved Requests per 1,000](chart)
Advanced imaging utilization is downward, with the greater decline in the self referral area.

Orthopedic Ordering

- 2012: 7.1
- 2013: 6.6

Cardiology Ordering

- 2012: 22.9
- 2013: 22.7

Oncology Ordering

- 2012: 4.1
- 2013: 3.1

Detailed analysis is available in the appendix.
AIM’S MANAGED MEDICARE POPULATION HAS LOWER IMAGING UTILIZATION**

HealthCore compared imaging utilization between FFS Medicare members and Anthem Medicare Advantage population managed by AIM’s (quality improvement) educational program.

Populations in Ohio, Indiana and Kentucky were sampled and analyzed through statistical modeling.

Prior to adjustment for demographic factors and population risk, Medicare Advantage population managed by AIM has shown significant lower utilization in outpatient high-tech diagnostic imaging*, compared to unmanaged FFS Medicare population.

**Data analysis completed at Duke University

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*Includes CT, MR, Nuclear Medicine, PET, stress echocardiography and resting echocardiography performed at outpatient hospital or physician office
**Impact of Pre-service Quality Improvement Program (without UM) on Medicare Expenditures for Advanced Imaging**

- HealthCore utilized a propensity weighting model to adjust for the differences between the two samples, including age, gender, state of residence and population risk scores based on Deyo-Charlson Comorbidity Index.

- **All things being equal, the imaging utilization of unmanaged Medicare population was 8.5% higher the managed.**

- The utilization difference in 2008 and 2009 was less significant possibly due to payment reduction, economic recession and membership change in those years.

### Imaging Utilization after Weighting

<table>
<thead>
<tr>
<th>Year</th>
<th>AIM</th>
<th>FFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>705</td>
<td>700</td>
</tr>
<tr>
<td>2009</td>
<td>691</td>
<td>689</td>
</tr>
<tr>
<td>2010</td>
<td>651</td>
<td>654</td>
</tr>
<tr>
<td>2011</td>
<td>603</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2008-2011 change in weighted rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIM</td>
<td>-15%</td>
</tr>
<tr>
<td>FFS</td>
<td>-7%</td>
</tr>
</tbody>
</table>
### THE AIM EXPERIENCE WITH MANAGING SELF-REFERERAL

#### CONCLUSIONS

<table>
<thead>
<tr>
<th>The impact of an RBM Utilization Management Program</th>
<th>The number of exams requested by self-referring providers decreased more than the number of exams requested by non self-referring providers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Impact of a Clinical Decision Support (RQI) Program</td>
<td>The impact of a pre-service Radiology Quality Improvement program in a Medicare Advantage population resulted in a 8.5% decrease in utilization when compared to a risk-adjusted FFS population.</td>
</tr>
<tr>
<td>New Opportunities to Increase Impact</td>
<td>There are opportunities to implement models that address same day of service imaging, impact imaging that is being required prior to an E&amp;M visit by a specialist and to drive alignment of appropriate imaging within episodes of care or across a disease state.</td>
</tr>
</tbody>
</table>
GOAL WAS TO IDENTIFY TRENDS IN SELF-REFERRAL ACROSS SPECIALTIES

OBJECTIVES

- Provide statistical analysis to evaluate the impact of removing self-referring privileges
- Determine imaging utilization variances between self-referral and non-self referral ordering physicians
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- Compare trends, utilization and cost across different specialties

SCOPE

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- Normalize patient population to the same risk and network constraints: Age 50 – 65, Commercial PPO
- Most recent 2 years of approved utilization data: Jan 2012 – Dec 2013, approved prior authorization requests for advanced imaging (CT, MRI, MPI, Echocardiography and PET)
- Separate ordering entities by specialties and by self-referral capabilities
Why Prior Authorization vs. Claims Data?

- Prior Authorization data identifies ordering physician and provides accurate information for rendering site. This allows to track more accurately the intent of the ordering physician. Ordering Physician information is incomplete on the claims data and rendering provider is identified under a billing entity and not always as true site of service.
- The selected population has a prior authorization requirement; Thus, 100% of reimbursable utilization is captured through authorization requests.

How was self-referral vs. non-self referral entity defined?

- True self referral ordering physicians are determined when ordering entity and rendering entity share the same Tax ID and the rendering site is not a facility. Since 100% of these entities are self-referral, this represents an accurate control group.
- Physicians who have ownership in imaging centers but under a different Tax ID, are identified under non-self referral group (this can create some data noise in non-self referral entity, but it keeps self-referral groups more accurate).
- Physicians with same TINs and Hospitals are considered hospital employed and are not self-referral.
- Physicians ordering to Facility under a different TIN are considered to have no affiliation with rendering provider (non-self referral).
### Advanced Imaging Utilization

**CA Commercial PPO**  
**Patient Age: 50 - 65**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Approved Services</strong></td>
<td>30,028</td>
<td>29,258</td>
<td>-3%</td>
</tr>
<tr>
<td><strong>% of Util</strong></td>
<td>14%</td>
<td>15%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Self Referral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>5,002</td>
<td>4,617</td>
<td>-8%</td>
</tr>
<tr>
<td>% Of Total</td>
<td>17%</td>
<td>16%</td>
<td>-5%</td>
</tr>
<tr>
<td>Unique Patients</td>
<td>4,298</td>
<td>3,950</td>
<td>-8%</td>
</tr>
<tr>
<td>Services per Patient</td>
<td>1.16</td>
<td>1.17</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Non-Self Referral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>25,026</td>
<td>24,641</td>
<td>-2%</td>
</tr>
<tr>
<td>% Of Total</td>
<td>83%</td>
<td>84%</td>
<td>1%</td>
</tr>
<tr>
<td>Unique Patients</td>
<td>20,510</td>
<td>20,176</td>
<td>-2%</td>
</tr>
<tr>
<td>Services per Patient</td>
<td>1.22</td>
<td>1.22</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Observations:**

1. **Orthopedic specialty are responsible for 15% of total advanced imaging utilization; while self referring physicians only control 16% of total orthopedic orders**  
   Hospitals purchasing physician practices and decrease in office imaging reimbursement has caused dramatic change in self referral market share.

2. **Overall trend in imaging is down, with greater decline observed in self referrals**  
   Choose wisely guideline enhancement and prior-authorization oversight has caused significant decline in unnecessary utilization. Self-Referral physicians adapt faster to guideline changes.

3. **Self Referral Physicians order less services per patient**
Advanced Imaging Utilization

CA Commercial PPO
Patient Age: 50 - 65

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Approved Services</td>
<td>24,432</td>
<td>23,746</td>
<td>-3%</td>
</tr>
<tr>
<td>% of Util</td>
<td>11.8%</td>
<td>11.8%</td>
<td>1%</td>
</tr>
<tr>
<td>Self Referral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>2,863</td>
<td>2,223</td>
<td>-22%</td>
</tr>
<tr>
<td>% Of Total</td>
<td>12%</td>
<td>9%</td>
<td>-20%</td>
</tr>
<tr>
<td>Unique Patients</td>
<td>842</td>
<td>753</td>
<td>-11%</td>
</tr>
<tr>
<td>Services per Patient</td>
<td>3.40</td>
<td>2.95</td>
<td>-13%</td>
</tr>
<tr>
<td>Non-Self Referral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>21,569</td>
<td>21,523</td>
<td>0%</td>
</tr>
<tr>
<td>% Of Total</td>
<td>88%</td>
<td>91%</td>
<td>3%</td>
</tr>
<tr>
<td>Unique Patients</td>
<td>7,746</td>
<td>7,632</td>
<td>-1%</td>
</tr>
<tr>
<td>Services per Patient</td>
<td>2.78</td>
<td>2.82</td>
<td>1%</td>
</tr>
</tbody>
</table>

Approved Requests per 1,000

Observations:

1. Cardiology specialty are responsible for 16% of total advanced imaging utilization; while self-referring physicians control 50% of total cardiology orders
   Cardiologists continue to be the largest self-referring group. There has been significant decrease in self-referring nuclear cardiology volume, but echocardiography is predominantly performed in physician office

2. Overall trend in cardiology ordered imaging is declining, with greater decline observed in non self referrals
   Cardiac imaging has seen the most dramatic decline while still being the largest self referring specialty

3. Self Referral Physicians order less services per patient
Observations:

1. **Oncology specialty are responsible for 12% of total advanced imaging utilization; while self referring physicians only control 9% of total oncology orders.**
   Hospitals purchasing physician practices and decrease in office imaging reimbursement has caused dramatic change in self referral market share.

2. **Overall trend in oncology ordered imaging is declining and all of decline is associated with self referral.**
   Majority of the decline is associated with reduced orders per patient.

3. **Self Referral Physicians order more services per patient.**
   Oncologists tend to order more services per patient when self referring. The gap between self-referring and non-self referring is closing due to changes in cancer imaging guidelines.
Patients undergoing MPI, Stress Echo, Resting Echo, PET, CT, MRI or Blood Pool Imaging were identified, including 48,445 managed and 68,853 unmanaged members.

1 in every 6 patients with an indexing diagnostic test will have a follow up test during the first 12 months following the initial test.

When the follow up period was extended to 24 months, 2 in every 9 patients had a repeated test.

After controlling for similar covariates, the relative likelihood of obtaining a repeated downstream cardiac imaging in the managed group was 11.7% lower than the unmanaged group.

SUSTAINING IMPACT ON UTILIZATION

- Addressing duplicate imaging requests
- Capitalize on real-time education opportunity when providers request an imaging exam expanding Peer-to-Peer imaging considerations
- Analyzing imaging downstream effects – additional unnecessary imaging and radiation exposure, unnecessary surgery and office visits, costs to the system, time off work, stress and harm to the patient
- Continue to encourage data sharing with specialty societies as a way to help them educate their members, close the loop and give back

RESEARCH AGENDA AND NEW INITIATIVES