

# *High Technology Diagnostic Imaging*

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## *Beyond the Alternative*

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# *Background*

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- Use and cost of elective outpatient HTDI rising significantly
- Health Plans implement prior notification
- Opportunity for health plans, medical groups and DHS to collaborate and develop an alternative solution

# *Initiative Goals:*

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- Facilitate development and implementation of point-of-service decision support as an alternative to health plan prior notification.
- Promote clinically appropriate imaging utilization by using appropriateness criteria based on ACR, ACC, etc.

# *Project Scope:*

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- Pilot HTDI appropriateness criteria at point-of-service for outpatient elective procedures in CT, MRI, Pet Scans and Nuclear Cardiology

# *ICSI HTDI Team*

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- Steering Committee
  - Health Plan and DHS Sub-Group
  - IT Sub-Group (ad hoc)
  - Pilot Medical Groups Sub-Group
  - Evaluation Sub-Group
  - Ad hoc Exploratory Group

# *Steering Committee Outcomes*

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- Defined scope, design criteria, measures
- Oversight of all sub-groups
- Maintained ongoing engagement by all stakeholders
- Analyzed progress and identified next steps
- Recommendations to ICSI Board

# *Health Plan & DHS Sub-Group Outcomes*

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- Identification and agreement of top 90% of HTDI CPT codes
- Trending of Health Plan data

# Health Plan Data

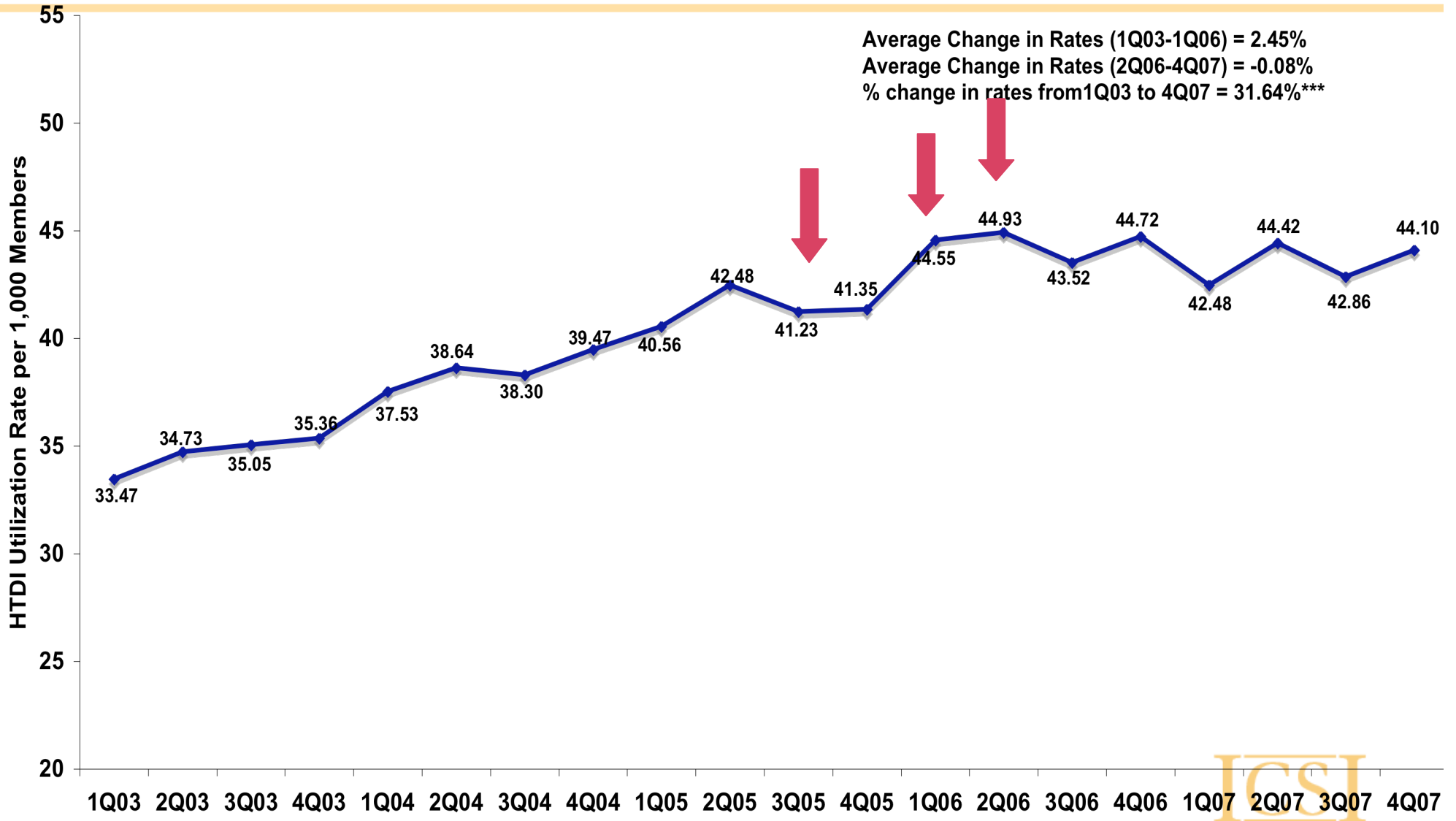
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## Average Change in Utilization Rates/ 1000

- 1Q03-1Q06 = 2.45%
- 2Q06-4Q07 = -0.08%
  
- % change in rates from 1Q03 to 4Q07 = 31.64%\*\*\*

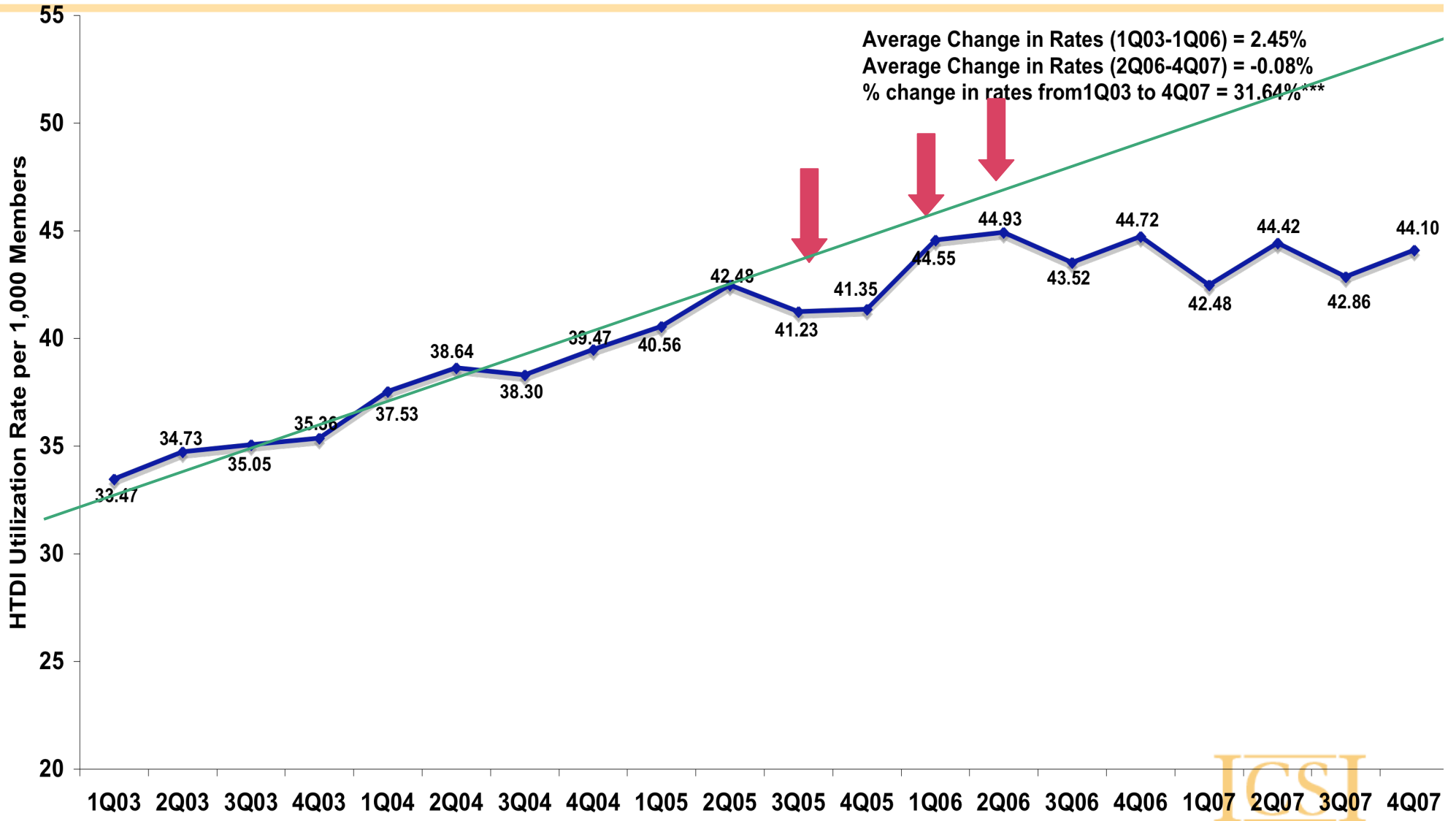
**Aggregate HTDI Utilization Rate per 1,000 Members, 1Q03-4Q07**  
**Aggregate Data Include: BCBS, HealthPartners, Medica, UCare and DHS**  
**Claims and Membership Data**

\*Membership profile differs across health plans.  
 \*\*\*Statistically Significant Result.



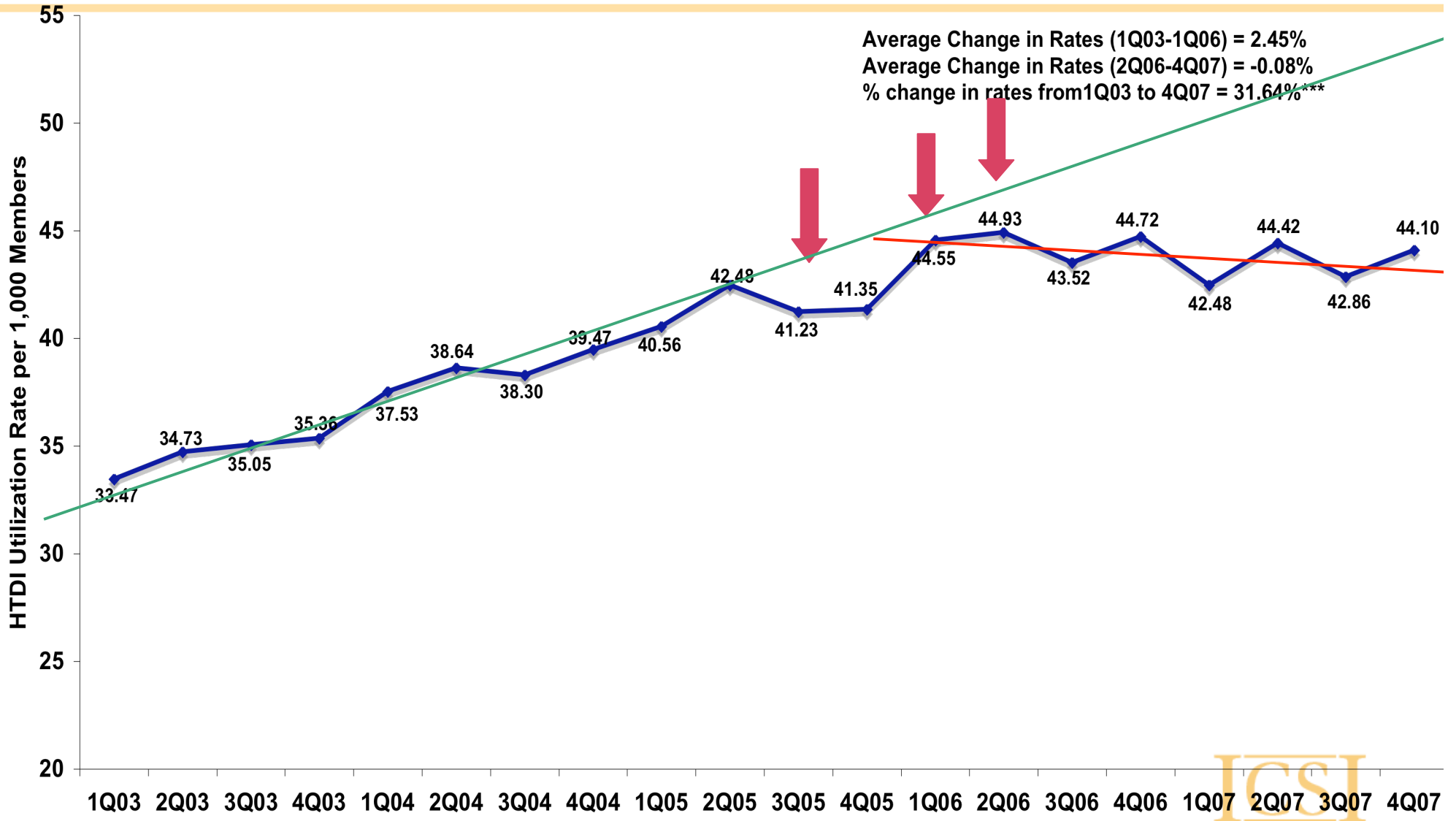
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# *IT Sub-Group Outcomes*

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- Agreement on daily data feed specifications

# *Pilot Medical Group - Outcomes*

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- Implementation completed by 5 medical groups:
  - Allina Medical Clinic
  - Fairview Health Services
  - HealthPartners Medical Group
  - Park Nicollet Health Services
  - St Mary's/ Duluth Clinic Health System
- Mayo Clinic continues to explore alternatives

# *Pilot Medical Group Data*

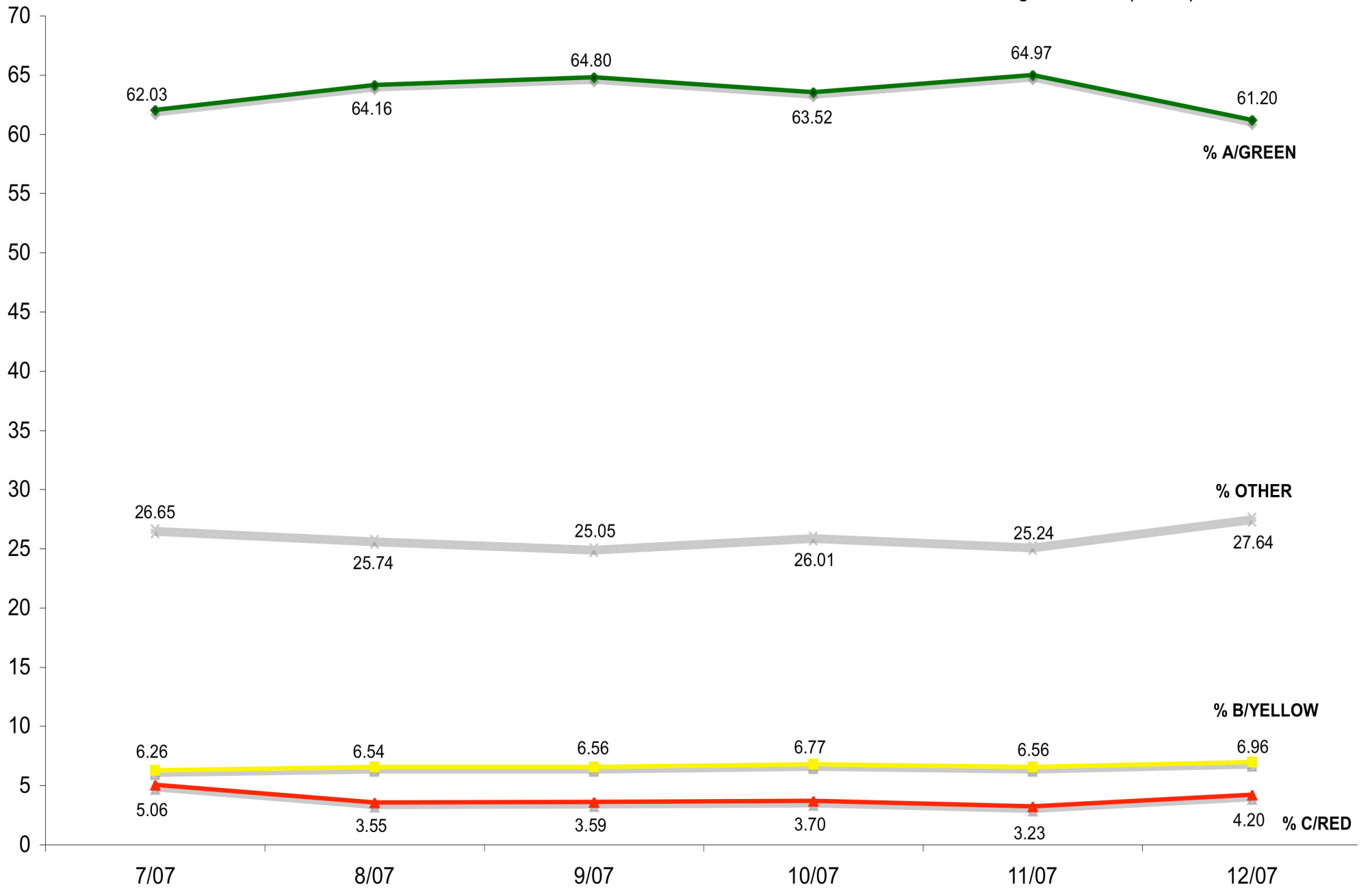
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July-December 2007

- 63% high utility (A's)
- 7% moderate utility (B's)
- 4% low utility (C's)
- 26% "other"

# Trends in HTDI Decision Support Orders for Allina, Fairview, HPMG, SMDC and Park Nicollet July-December 2007

Change in % A (7-12/07) = -1.34%  
Change in % Other (7-12/07) = 3.75%



# *Initial Pilot Data Summary*

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- Aggregate data fairly stable
- Small variation in four pilot member data
- The member who had more extensive set of appropriateness criteria had:
  - higher "A's" (80%+)
  - significantly lower "other's" ( $\approx 8\%$ )
  - lower "C's" (nearly 0%)

# *Pilot Experience*

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- Results by clinic, provider and CPT codes
  - addressing outliers with education
- Recognition of gaps in criteria & science
- Development of Nuclear Cardio criteria
- Reviewing positive findings and impact on patient outcomes

# *Pilot Lessons Learned:*

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- Limitations in ACR criteria
- Maintaining criteria internally is labor intensive
- There are sources for consistent criteria
- Options for medical groups without EMR
- Decision support well received
- HTDI Alternative more efficient than Prior Notification
- Allows for shared decision making with patient

# *Evaluation Sub-Group- Chart Review*

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## Chart Review Scope

- Information in chart to measure compliance with appropriateness criteria?
- Was there a change after decision support was implemented?
- Did orders with positive findings change after decision support was implemented?

# *Chart Audit- Method*

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- 300 charts pre and post decision support implementation
- 3 HTDI procedures (CT Head, MRI Head, MRI Spine)
- 1 large medical group in twin cities

# Chart Audit - Results

	Pre	Post	P
N	151	148	
Definite fit with criteria	79.5%	89.2%	.02*
A	70%	82%	.04**
B	22%	12%	
C	8%	6%	
Ambiguous fit	2.6%	3.4%	
No fit	17.9%	7.4%	
Within normal limits	37.8%	31.8%	.33
Positive N (%)	32 (21.2%)	44 (29.7%)	.24
Related to indication	78.1%	75.0%	
Further studies rec.	15.6%	18.2%	
Effect on care:			
Major	38%	36%	.79***
Minor	31%	25%	
Uncertain	13%	18%	
None	19%	20%	

# *Ad Hoc Exploratory Group Outcomes*

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- Consensus reached - point-of-service decision support using common appropriateness criteria
- Evaluation of vendors
- Recommendation to HTDI Steering Committee of top two vendors

# *Next Steps*

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- Pending ICSI Board Approval:
  - Vendor Negotiations
  - Secure Financial Support from Stakeholders
  - Implementation Planning

# *Questions??*

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