Interoperability and Health Information Exchange Workgroup

Micky Tripathi, chair
Chris Lehmann, co-chair

May 22, 2015
• IOWG was asked to look at:
  – Objective 7: Health Information Exchange
  – Specific questions from NPRM, including questions on HIE governance
Objective 7 (Health Information Exchange) comprises 3 measures, and providers have to meet only two out of three (but must report on all three):

- Measure 1: **Send** electronic summary of care record for 50% of outgoing transitions or referrals
- Measure 2: **Receive and incorporate** electronic summary of care record for 40% of incoming transitions or referrals
- Measure 3: **Reconcile** clinical information for 80% of transitions or referrals

We note that these measures are inter-related

- The ability to receive is related to the volume of sending
- The availability of clinical information to reconcile is related to the volume of information sent, and received
- The ability to streamline and automate information reconciliation is related to the quality of the information received
Agreement on the importance of the objectives and on increasing thresholds

In general, the IOWG agrees with the direction and goals of the Objective 7 measures
- Important for quality and safety
- HIE functions are gaining traction in the market, and these objectives are good impetus to keep progressing

However, we are concerned about setting thresholds that are unrealistically high
- We agree with setting higher thresholds
- However, we don’t want to have to backtrack on the threshold, as has happened with VDT
- Want to motivate providers to “own the problem”, but not penalize them for factors that are genuinely out of their control

Can balance thresholds with judicious allowance for exclusions
- May want to consider trade-offs between thresholds and exclusions
- Keep threshold high if also allowing exclusions, or conversely, lower threshold if not allowing exclusions
What is current experience with Stage 2?

Among those who have attested to Stage 2, rates are generally below proposed rates for Measure 1, and well above proposed rates for Measure 3 (med rec only)

- Measure 1: EP = 40% and EH = 36% versus proposed threshold of 50%
- Measure 3: EP = 93% and EH = 87% versus proposed threshold of 80%
  - Note: Stage 2 required only medication reconciliation – Stage 3 proposal adds med allergies and problems, and raises the threshold to 80% for all three

However, there is likely strong selection bias in the current Stage 2 attestation results

- High percent of providers (76% of qualifying EPs and 35% of qualifying EHs) either taking hardship exemptions, leveraging the flex rule, or have not yet attested in 2014
- Furthermore, very high percent (86%) of EPs have taken exclusion from the “send” measure for <100 transitions/referrals in a reporting period
  - Consequence of a reduction in the reporting period during 2014 from 1 year to 90 days without corresponding adjustment to the exclusion threshold
- Thus, only about 8,000 EPs have attested to Stage 2 for 2014 so far, who are likely better positioned for successful achievement of the measures than the average provider

Stage 2 experience suggests that the Stage 3 thresholds are higher compared with performance to dates, and perhaps significantly higher given the small sample results to date.
<table>
<thead>
<tr>
<th>Stage 3 NPRM Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measure 1:</strong> Send electronic summary of care record for 50% of outgoing transitions or referrals</td>
<td>1. Increase from Stage 2 threshold (10%)</td>
</tr>
<tr>
<td></td>
<td>2. Requires electronic transport but does not specify use of a standard or participation in any particular HIE arrangement (i.e., no longer requires Direct transport or under a governance mechanism created by ONC)</td>
</tr>
<tr>
<td></td>
<td>3. Allows inclusion of patient self-referrals</td>
</tr>
<tr>
<td></td>
<td>4. Allows inclusion of transitions/referrals to providers on the same EHR (“selfies”)</td>
</tr>
<tr>
<td></td>
<td>5. Summary of care must include CCDS data elements</td>
</tr>
<tr>
<td></td>
<td>6. Allows exclusion if zero transitions/referrals in reporting period</td>
</tr>
<tr>
<td></td>
<td>7. Allows exclusion for providers in counties with low broadband penetration</td>
</tr>
</tbody>
</table>
IOWG recommends the following on Measure 1:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Recommendation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lower threshold to 40% (from 50%)</td>
<td>Disagree with NPRM</td>
</tr>
<tr>
<td>2.</td>
<td>Allow any electronic transport</td>
<td>Agree with NPRM</td>
</tr>
<tr>
<td>3.</td>
<td>Allow patient self-referrals</td>
<td>Agree with NPRM</td>
</tr>
<tr>
<td>4.</td>
<td>Do not allow “selfies”</td>
<td>Disagree with NPRM</td>
</tr>
<tr>
<td>5.</td>
<td>Allow flexibility in CCDS payload</td>
<td>Disagree with NPRM</td>
</tr>
<tr>
<td>6.</td>
<td>Allow exclusion for &lt;100 transitions/referrals</td>
<td>Disagree with NPRM</td>
</tr>
<tr>
<td>7.</td>
<td>Do not allow exclusion for low broadband penetration</td>
<td>Disagree with NPRM</td>
</tr>
</tbody>
</table>
Measure 1 Recommendations Discussion (1 of 3)

1. **Lower threshold to 40% (disagree with NPRM)**
   - Stage 2 data suggests that average provider will be well below 50%
   - 2014 exclusion allowance (by which 86% of EPs avoided the TOC requirement) has slowed market adoption of TOC functions
   - However, want to keep rate high to motivate forward progress

2. **Allow any electronic transport (agree with NPRM)**
   - Industry challenges with Direct could be barrier to achievement in many markets (also, see recommendation on HIE governance)
   - Gives credit to those who have other types of HIE capabilities

3. **Allow patient self-referrals (agree with NPRM)**
   - IOWG is concerned that the measure adds workflow burden which, without automated HIE functions, offers little benefit to patient care
   - However, inclusion encourages use of automated HIE functions such as automated response to utilization alerts or electronic query
4. Do not allow “selfies” (disagree with NPRM)
   – Disproportionately favors integrated delivery networks
   – “Selfies” do not add to patient care – information already available in EHR and in most cases is accessed that way

5. Allow flexibility in CCDS payload (disagree with NPRM)
   – In many transition or referral use cases, it is not clinically beneficial to provide the entire CCDS
   – Contributes to “CCDA bloat”, which many providers note makes CCDAs unusable
   – Allow provider discretion, as is proposed for labs and clinical notes, rather than requiring that all CCDS elements be populated if available
6. **Allow exclusion for <100 transitions/referrals** *(disagree with NPRM)*
   - Cost of implementing electronic capabilities for <100 transitions/referrals per year outweighs clinical and efficiency benefits to patients
   - Any future adjustments to reporting periods should adjust inclusion/exclusion thresholds as well

7. **Do not allow exclusion for low broadband penetration** *(disagree with NPRM)*
   - This exclusion appropriate for patient engagement measures but not for measures of provider-provider exchange
   - There may be circumstances where electronic exchange is not dense enough to allow a provider to meet measure threshold
   - IOWG did consider recommending an “ecosystem” exclusion to address such cases, however, we were not able to come up with an approach that didn’t add more complexity than it solved
   - We do recommend that CMS monitor this issue carefully and consider such an exclusion in the future if the problem appears significant and beyond the control of EPs and EHs in certain markets (e.g., exclusion if large fraction of transitions/referrals go to settings that are not EPs or EHs)
### Measure 2 Description

<table>
<thead>
<tr>
<th>Stage 3 NPRM Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measure 2:</strong></td>
<td></td>
</tr>
<tr>
<td>Receive and incorporate electronic summary of care record for 40% of incoming transitions or referrals of new patients</td>
<td></td>
</tr>
<tr>
<td>1. New measure – 40% threshold</td>
<td></td>
</tr>
<tr>
<td>2. Need to “incorporate” summary of care record</td>
<td></td>
</tr>
<tr>
<td>3. Allows for “active” or “passive” receipt; allows any type of query</td>
<td></td>
</tr>
<tr>
<td>4. Allows patients “never before encountered” for whom “electronic summary of care is available”</td>
<td></td>
</tr>
<tr>
<td>5. Restricts applicability to transition/referrals episodes</td>
<td></td>
</tr>
<tr>
<td>6. Allows exclusion for encounters where information “unavailable” – requested manually and not fulfilled, and either tried through an HIE and not fulfilled OR provider has no access to HIE with query capability</td>
<td></td>
</tr>
<tr>
<td>7. Allows exclusion for providers in counties with low broadband penetration</td>
<td></td>
</tr>
<tr>
<td>8. Allow utilization alerts?</td>
<td></td>
</tr>
</tbody>
</table>
IOWG recommends the following on Measure 2:

1. Change threshold to: incorporate any type of information for XX% of TOCs/referrals or never before encountered patients, and CCDAs for YY% of TOCs/referrals or never before encountered patients

2. Allow for provider discretion in what to incorporate

3. Allow for “active” or “passive” receipt; allow any type of query (i.e., phone, fax, etc)

4. Allow “never before encountered” in measure denominator

5. Allow for queries outside of specific transition/referral episodes

6. Allow exclusion for “information unavailable” or “electronic means unavailable”

7. Merge “non-clinical settings” into Measure 2

8. Do not allow “utilization alerts”

9. Do not allow exclusion for low broadband penetration
1. **Lower threshold to 25% (from 40%) (disagree with NPRM)**
   - This is a new measure for which we have no experience
   - By allowing some flexibility in how it is done, we are still comfortable setting a high bar for a new measure
   - Needs to be somewhat aligned with Measure 1 – ability to receive and “incorporate” tied to quantity and quality of what is sent

2. **Allow for provider discretion in what to incorporate (disagree with NPRM)**
   - Draft rule requires “incorporate” if available
   - Addresses concern about “CCDA bloat” – complements discretion allowed in Measure 1
   - Also recommend that CMS clearly define “incorporate” vs “reconcile”

3. **Allow for “active” or “passive” receipt; allow any type of query (agree with NPRM)**
   - Good first step to enabling fully electronic query capability
   - With no widely available, mature standards for query, and no ecosystem to support such exchange, flexibility is required
   - Gives credit to those who are in data sharing arrangements with electronic query or record location services
Measure 2 Recommendations Discussion (2 of 5)

4. **Allow “never before encountered” (agree with NPRM)**
   - IOWG is concerned that the measure adds workflow burden which, without automated HIE functions, offers little benefit to patient care.
   - However, inclusion encourages use of automated HIE functions such as automated response to utilization alerts or electronic query.
   - Recommend that CMS define “never before encountered” to mean “no record in EHR” – covers cases where patient sees new EP in same clinical organization.

5. **Allow exclusion for “information unavailable” (agree with NPRM)**
   - Ecosystem maturity will take time so need to accommodate such exceptions if we keep a high 25% threshold on a new measure.
   - Should define HIE availability as: “Query capability has been in production and functionally available through the entire reporting period, as attested to by provider.”
6. Allow for queries outside of specific transition/referral episodes (disagree with NPRM)
   - Population health management is increasing demand for information outside of discrete episodes of care
   - Including information received from queries outside of specific transitions/referrals encourages use of advanced HIE functions and promotes cognitive activities such as care planning and care coordination
   - Including such queries does require adjustment of measure definition – how to determine the denominator for discretionary queries?
   - For measure, allow EP/EH discretion on which queries are clinically appropriate and include in numerator and denominator
   - Within an EP practice, give MU credit to any EP who has seen patient (preferred), or to PCP, or to last EP to have seen patient
7. **Merge “non-clinical settings” into Objective 7**

Reconciling these measures is not straightforward because they apply to different types of information from different types of providers for different groups of patients. While we did not have time to get consensus on a specific recommendation that merges the measures, we do recommend that CMS use the following principles in doing so:

1. Merge with Measure 2 as recommended
2. Do not set separate targets for “non-clinical providers” (e.g., separate measure or X% for all providers, Y% for “non-clinical providers”)
3. Set a two-tier objective, with a higher threshold with greater content/format flexibility and a lower threshold based on CCDAs (e.g., incorporate any type and format of clinically relevant information for 25% of TOCs/referrals, incorporate CCDAs for 15% of TOCs/referrals)
4. Retain TOCs/referrals + never before encountered + electronically queried as denominator
5. Require electronic means of transmission
6. Allow exclusion for “electronic means not available”
7. Allow incorporation of electronically queried information outside of specific episodes of care
8. Clearly define the meaning of “incorporate” for CCDA and non-CCDA information
8. Do not allow “utilization alerts” (agree with NPRM)
   - Too complex to determine “qualifying alert”
     - Not all alerts are related to transitions/referrals for a particular EP/EH
     - Multiple alerts often generated in a single episode of care
   - Utilization alerts typically contain very little, if any, clinical information

9. Do not allow exclusion for low broadband penetration (disagree with NPRM)
   - This exclusion appropriate for patient engagement measures but not for measures of provider-provider exchange
## Measure 3 Description

<table>
<thead>
<tr>
<th>Stage 3 NPRM Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measure 3:</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Reconcile clinical information for 80% of transitions or referrals of new patients | • Increase threshold from 50% to 80%  
  • Increase scope to include med allergies and problems as well as medications  
  • Required for transitions/referrals and any encounter with new patients  
  • Automated versus manual?  
  • Allow credentialed MAs to perform med rec?  
  • Applicability to specialists? |
# Measure 3 Recommendations

IOWG recommends the following on Measure 3:

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Set threshold at 80% for medications and medication allergies</td>
<td>Agree with NPRM</td>
</tr>
<tr>
<td>2. Lower threshold for problems to 10%, or make problems optional</td>
<td>Disagree with NPRM</td>
</tr>
<tr>
<td>3. Remove “never before encountered” patients from denominator</td>
<td>Disagree with NPRM</td>
</tr>
<tr>
<td>4. Allow either automated or manual reconciliation</td>
<td>Agree with NPRM</td>
</tr>
<tr>
<td>5. Allow credentialed MAs to perform reconciliation</td>
<td>Disagree with NPRM</td>
</tr>
<tr>
<td>6. Allow exclusions for some specialists</td>
<td>Disagree with NPRM</td>
</tr>
</tbody>
</table>
1. Set threshold at 80% for medications and medication allergies (agree with NPRM)
   - The IOWG believes that information reconciliation should be done 100% of the time, however, need to account for practical reasons where it may not be possible or clinically appropriate.
   - The IOWG is concerned with setting such a high threshold for reconciliation while the thresholds for sending (Measure 1) are much lower.
   - However, we agree with CMS that reconciliation is critically important.
   - We believe that meds and meds allergies are sufficiently well-defined, and there is enough flexibility in how reconciliation can be performed to meet the requirement, that it is appropriate to set a high goal in these areas.
Measure 3 Recommendations Discussion (2 of 4)

2. Lower threshold for problems to 10%, or make problems optional (disagree with NPRM)

- The IOWG is concerned with expanding the scope to problems at such a high threshold
- Problem reconciliation is operationally very difficult and different in nature from meds and med allergies reconciliation
  - Patients can report meds and med allergies in most cases, however, they are less able to reliably report on diagnoses
  - There is ambiguity in coding conventions – multiple ICD codes can cover single experience of illness
  - Providers vary widely in their approach to problem lists – “lumpers versus splitters”, active versus inactive, etc
- Agree that it should be done over time and thus IOWG recommends including it at low level to give CMS opportunity to increase it over time
3. Remove “never before encountered” from denominator (disagree with NPRM)
   - With new patients there is nothing to reconcile against
   - Recommend that CMS define “never before encountered” to mean “no record in EHR” – covers cases where patient sees new EP in same clinical organization

4. Allow either automated or manual reconciliation (agree with NPRM)
   - There is still too much variation in quality of structured data to require automated reconciliation
5. IOWG did not reach consensus on if credentialed MAs should be allowed to perform reconciliation (disagree with NPRM)
   - IOWG believes that providers should have flexibility to delegate work as clinically appropriate and as allowed by State law
   - However, some members of the IOWG remain concerned that MAs may not be qualified to perform some reconciliation such as problems
   - The IOWG recommends that CMS emphasize that providers are responsible for ensuring that staff are fully qualified and diligently supervised if they are allowed to perform reconciliation functions

6. Allow exclusions for some specialists (disagree with NPRM)
   - High levels of reconciliation is not appropriate for some specialties with narrow scopes of practice (e.g., low prescribers, orthopedists for whom problem list reconciliation is not clinically relevant, information not available due to narrow scope of practice, etc)
   - There are no “low volume” exclusions allowed for Measure 3
   - The IOWG recommends that CMS include exclusions for specialties where it may not be clinically relevant or practically possible to achieve high rates of formal reconciliation.

7. CMS should clarify that reconciliations occurring prior to the patient visit count towards the numerator.
NPRM allows any electronic means for transport for Measures 1 and 2

CMS questions in NPRM

- Should providers be allowed to use any electronic means, OR only “in a manner consistent with governance mechanism ONC establishes for nationwide health information network”
- How should governance mechanism established by ONC at later date be incorporated into EHR incentive program?

IOWG agrees with allowing any electronic means and NOT tying EHR incentives to governance mechanisms that may be established by ONC (agree with NPRM)
For Measure 1 and Measure 2, providers should have flexibility in which electronic means they use to meet objectives

- Future objectives that require HIE capabilities should focus on the “what” (HIE outcomes), not on the “how” (HIE processes)
- It is the providers’ responsibility to assure that the means used for electronic exchange satisfy Federal and State privacy and security laws (among other regulatory requirements), their patients’ clinical needs, and their business needs
- It would be very risky for the Federal government to pick “winners and losers” among data sharing arrangements – the market is highly fragmented, heterogeneous, and very dynamic
- Tying incentives to HIE governance would not be practical until or unless ONC established a governance mechanism that applied to all HIE, which would be operationally complex and take considerable effort and time to establish
Nevertheless, a more assertive Federal Government role may be required at some future date if HIE does not progress sufficiently, safely, and equitably according to objective and meaningful metrics

– CMS should establish meaningful benchmarks and associated metrics to assure that health information exchange is progressing safely and equitably across the health care continuum

– Market-based governance mechanisms are already getting traction and should be encouraged through value-based purchasing, alignment of Federal agency purchasing and provider activities, and guidance on privacy/security/safety

– The JASON Task Force recommended a series of specific non-regulatory steps that the Federal Government should take to promote nationwide interoperability