Defining Quality: The Universal Provider Datasource Data Quality Task Force

Sorin Davis, CAQH
Dana Mattingly, Coventry Health Care

simplifying healthcare administration

CAQH

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Agenda

• Introduction and Panelists.
• Data Quality Work Group:
  – Determining Objectives.
  – Recommendations.
• Data Quality Study:
  – FTI.
  – Study Methodology.
  – Outcomes.
  – Next Steps.
Introduction and Panelists

- Dana Mattingly
  Director, Operations Support
  Credentials Verification Center, Coventry Healthcare

- Sorin Davis
  Managing Director, UPD
  CAQH
UPD (then UCD) was launched in 2002 to address the following:

- **Redundancy:** Providers are asked to complete multiple forms essentially requesting the same information.

- **Follow-up:** Omitted and illegible responses require significant resources and result in processing delays.

- **Misalignment:** Different credentialing cycles exacerbate the problem requiring providers to complete the process at different points in time.

- **Off-cycle updates:** Follow-up required to maintain accurate data between credentialing events so that provider directories, referrals, claims, and other provider and member services are in agreement.

- **Turnaround:** Providers are frustrated with time between application submission and when a decision is finally communicated.
Provider Data Quality: The Issues

• Various departments throughout the enterprise need provider data:
  – Different needs.
  – Different data.
  – Different timeframes.

• Sources for provider data vary:
  – Provider self reported.
  – Primary sources.
  – Third party databases.
  – Internal databases.
  – Delegates.

• Consistency, timeliness and accuracy of data varies.
CAQH View of Provider Data

Non-Payer Data Requirements

Enterprise Wide Data Needs

Elements Required on Most Paper Applications

Minimum Required by Accreditation Organizations
The Lewin Group was engaged to:

- Identify the current and potential use for provider information among participating organizations.
- Identify barriers preventing wider use of CAQH’s data beyond current uses.
- Make recommendations about how CAQH can achieve wider acceptance and uptake of the Universal Provider Datasource (UPD) initiative.
CAQH created the **Data Quality Work Group** to study and make recommendations on how to validate and expand the use of the UPD data throughout the organization.
The Data Quality Work Group: Responsibilities

• Define and develop methods to confirm completeness, timeliness and quality of the provider data in the UPD.
• Identify what/how provider data is used throughout the health plan enterprise.
• Identify additional data that is required for broader adoption and utilization of the UPD by participating organizations, including critical data elements common to all enterprise users.
• Summarize work group findings.
• Based on findings, recommend actions to improve and maintain the overall data quality of the UPD; and determine the UPD data applicability and value throughout the organization.
Data Quality Work Group: Membership
Data Quality Work Group

Identified a comprehensive list of departments/functions within participating organizations that use provider data:

- Credentialing
- Provider Directory
- Claims
- Communications
- Network Development
- External Reporting
- Finance
- Marketing/Sales
- Medical Affairs
- Pharmacy
- Provider Data Management/IS
- Customer Service
Data Quality Work Group

- Master List of Data Elements:
  - All fields on CAQH application.
  - Current requirement status:
    - Required.
    - Conditionally Required.
    - Suggested.
    - Optional.
  - Fields to consider adding in the future.
Data Quality Work Group

- Work Group members analyzed the data elements and identified which elements are “critical” to each of the departments/functions and which are voluntary/optional.
- Conducted regulatory review of elements:
  - Group members volunteered to sub-committee.
  - Identify regulatory needs and UPD requirements.
  - Fields that are required by regulatory bodies and not already required by CAQH were identified as high priority.
- Defined list of 103 “critical” items to test quality of real data.
Data Quality Work Group Conclusion

• While a standard definition of provider data accuracy does not exist, the work group determined that a transparent and statistically valid study to determine the quality of UPD data was needed.

• CAQH commissioning an independent study to examine and validate the completeness and accuracy of the data in the UPD, including:
  - timeliness of UPD data and
  - validation of provider data updates.
UPD Data Quality Study

• CAQH retained FTI to conduct the data quality study:
  – FTI is a global consulting company with rich expertise in helping organizations enhance and protect their enterprise value, including deep statistical analysis capabilities.

• Goals:
  – Provide an independent, objective and statistically valid assessment of UPD data quality.
  – Identify opportunities to enhance UPD processes and controls to improve data quality.
  – Create benchmark measures for future data quality assessments.
  – Develop a foundation for continuous data quality improvement.
Study Methodology

- FTI conducted a large scale analyses of 205,132 active UPD physician records to assess data completion rates and evaluate the logic and reasonableness of provider responses.
  - FTI further identified a statistically valid sample size to analyze the accuracy of the key data fields identified by the work group.
  - A statistically valid sample size was determined by first conducting a probe sample, as recommended by DOH, HHS office of the Inspector General and CMS.
  - Validated accuracy of 3,360 UPD data fields, associated with 112 randomly selected providers.
  - This sample size produced statistically valid results within a plus or minus 1% range with a 95% confidence level.

- FTI then employed a combination of two research methods to determine data accuracy.
  - Use of publicly available information sources.
  - Direct outreach to providers.

- Accuracy was assessed in both “Absolute” and “Functional” terms.
  - Absolute data accuracy - exact match of every character of a data element to its independent source.
  - Functional data accuracy - data match that is sufficient to achieve the intended purpose of the data element.
Key Findings: UPD Completion Rates and Response Logic

- Findings confirmed that providers complete UPD questions at a high rate, regardless of whether answers are required by the system.
- Provider data subject to systemic logic testing confirmed that individual data field entry integrity is high. The occurrence rate of fictitious entries, such as telephone numbers of 999-999-9999, is near zero (≈ 0.10%).
- Two categories of errors are notable:
  - 7.3% of providers re-attesting to their information failed to update expired state licenses.
  - 2.7% of providers had contradictory responses to related questions; for example, answering “No” to accepting new patients, and subsequently answering “Yes” to accepting new Medicare patients.
Key Findings: UPD Data Element Review Results

• Study results indicate that the UPD provider data is 92.3% (absolute) to 93.9% (functional) accurate.

• The majority of errors observed (80%) fit into five categories that CAQH can be addressed with improved UPD data collection techniques.
  – Providers attested to outdated practice location and hospital affiliation (26% of errors).
  – Incorrect practice name reporting (14% of errors).
  – Inconsistencies in state license information (20% of errors).
  – Inaccurate response to practice and provider languages spoken (13% of errors).
  – Erroneous responses to Medicare and Medicaid provider status (8% of errors).

• Improving the data quality in these five categories can increase overall data accuracy by as much as 4.9% (functional) to 6.2% (absolute) raising the potential accuracy rates to 98.5% (absolute) and 98.8% (functional).
Key Findings: UPD Data Element Review Results – Details

1. Providers attesting to outdated Practice and Hospital affiliation information:
   - **Detail**: 26% of total errors were associated with providers who re-attested but failed to update practice location changes and/or changed hospital affiliations.
   - **Observation**: Provider data is fluid and continuous systematic monitoring of non-date sensitive provider data changes is extremely difficult. Analysis of the providers with these data errors indicates that the information was originally correct but the providers failed to update changes at time of re-attestation.
   - **Initial Recommendation**: Consider developing system edits/procedures that periodically prompt providers to review key data fields that can change over time (such as primary practice locations and hospital affiliations).
Key Findings: UPD Data Element Review Results – Details – cont.

2. **Incorrect practice name:**
   - **Detail:** 14% of total errors were attributable to incorrect reporting of practice names.
   - **Observations:** Providers are entering their own name rather than the name of their practice.
   - **Initial Recommendation:** Improve UPD question wording and/or incorporate data edit that triggers an alert to the provider to confirm when the practice name field contains the provider’s name.

3. **Inconsistencies in state license information:**
   - **Detail:** 20% of the total errors were related to state license numbers not matching online state medical board data (12%) or incorrect license expiration dates (8%).
   - **Observation:** Incorrect State license numbers are the result of two issues:
     - state medical boards format licenses for on-line reports in a different manner than what the provider sees on the physical license.
     - Expiration date errors are the result of providers attesting to outdated information.
   - **Initial Recommendation:** Further analysis to determine why state on-line systems report license information in formats different than how reported on actual documents. Address expiration date errors through appropriate system edits at time of re-attestation.
Key Findings: UPD Data Element Review Results – Details – cont.

4. **No response to practice and provider languages spoken fields:**
   - **Detail:** 10% of the total errors observed were related to instances in which no additional language was indicated for the provider or their practice when, in fact, additional languages were spoken or translation services were available.
   - **Observation:** This error was consistently a failure to respond to the question as opposed to incorrectly identifying languages spoken.
   - **Initial Recommendation:** Create a required lead-in “Yes/No” question for both the provider and practice name fields to guide providers into entering more information.

5. **Erroneous responses to Medicare and Medicaid provider status:**
   - **Detail:** 8% of the total errors observed were related to providers entering incorrect Medicare (2%) or Medicaid (6%) participating status.
   - **Observation:** Possibility of provider confusion regarding these questions as well as those that address whether or not new Medicare/Medicaid patients are accepted. Participation in some but not all managed Medicaid programs also created provider confusion in responding correctly to Medicaid participation status.
   - **Initial Recommendation:** Uncouple Medicaid and Medicare participation questions from accepting new patient questions.
Initial Recommendations Summary

- Expand and enhance system edits and controls to alert providers of expired information at time of re-attestation.
- Explore system generated reminders/prompts for providers to periodically review and confirm fields that can change over time such as primary practice location and hospital affiliations.
- Refine unclear and/or ambiguous questions that can produce incomplete and/or inaccurate provider responses.
- Introduce more required lead-in “Yes/No” questions to increase consistency of responses in several existing questions (such as languages spoken).
- Conduct further analysis surrounding discrepancies between on-line state license board data and licensure documents issued to providers.
Next Steps

- CAQH has made the data quality report publicly available for download: [http://caqh.org/UPDDQreport.php](http://caqh.org/UPDDQreport.php)
- CAQH and Work Group to prioritize recommendations for data quality improvement.
- CAQH and ACS to develop specifications for necessary system modifications, enhancements and process improvements.
- CAQH to identify necessary funding for development and implementation.
- Implement modifications, enhancements and process improvements.
- Conduct additional data quality analyses to measure impact of improvements.