



# Shifting Data Quality Follow-Up Methods for a Time-Series Collection of Local and State Agencies

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# Overview of Presentation

- Acknowledgements
- Mortality in Correctional Institutions (MCI) and Annual Survey of Jails (ASJ) collections
- Introduction to Data Quality Follow-up (DQFU)
- Research Questions
- Revisiting DQFU definitions and protocols
- Results of modified DQFU protocol
  - Timing of contacts
  - Timing of resolutions
  - Case resolution rates
  - Item response rates
  - Budgetary
- Lessons Learned
- Conclusions

# Acknowledgements

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- RTI International
  - Scott Ginder, MCI-ASJ Analysis and Reporting Task Leader
  - Megan Waggy, MCI-ASJ Data Collection Manager

*The views expressed in this presentation do not necessarily reflect the official policies of the U.S. Department of Justice or the Bureau of Justice Statistics; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.*

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# Mortality in Correctional Institutions

- Formerly known as Deaths in Custody Reporting Program (DCRP)
- Primary source of mortality statistics within the American correctional system
  - 50 state Departments of Corrections (DOCs)
  - Approximately 2,900 local jail jurisdictions
- Multimode data collection
  - Respondents are typically prison and jail administrators
  - Respondent submission of agency administrative data
  - Two forms: individual death reports and annual summary
  - Web, paper, fax, e-mail, bulk data file, and (during nonresponse follow-up) telephone

**MCI** Mortality in  
Correctional Institutions



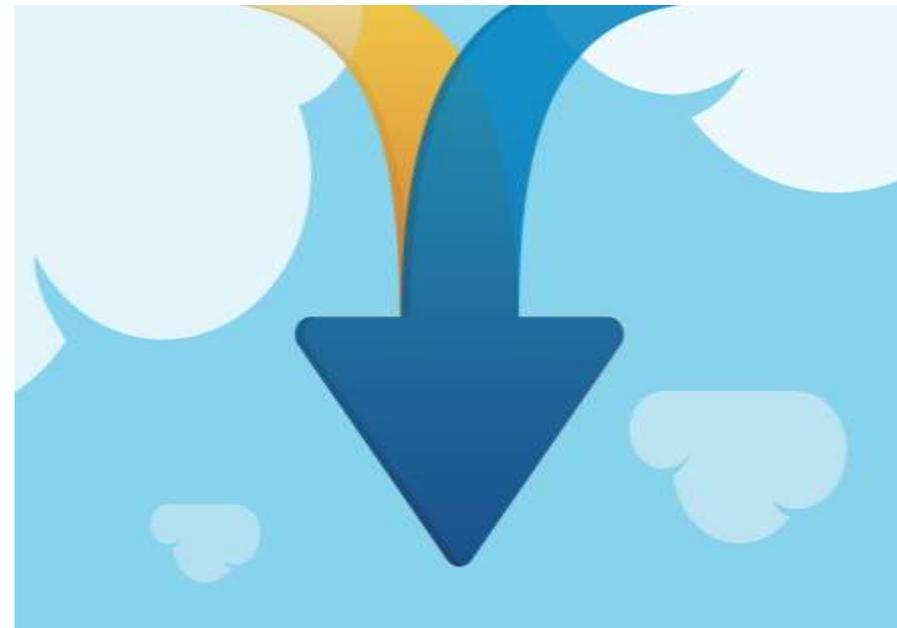
# Annual Survey of Jails

- Collects data annually from a sample of local jail jurisdictions
- Data are used to estimate:
  - Number, characteristics of jail inmates
  - Jail capacity
  - Other key jail population statistics
- The 2015–2016 ASJ was integrated into the MCI collection, whereby ASJ jails
  - Received tailored communications
  - Submitted data via an expanded form
  - Still provided customary MCI data
  - Submitted data via the same multimodes as MCI



MCI

ASJ

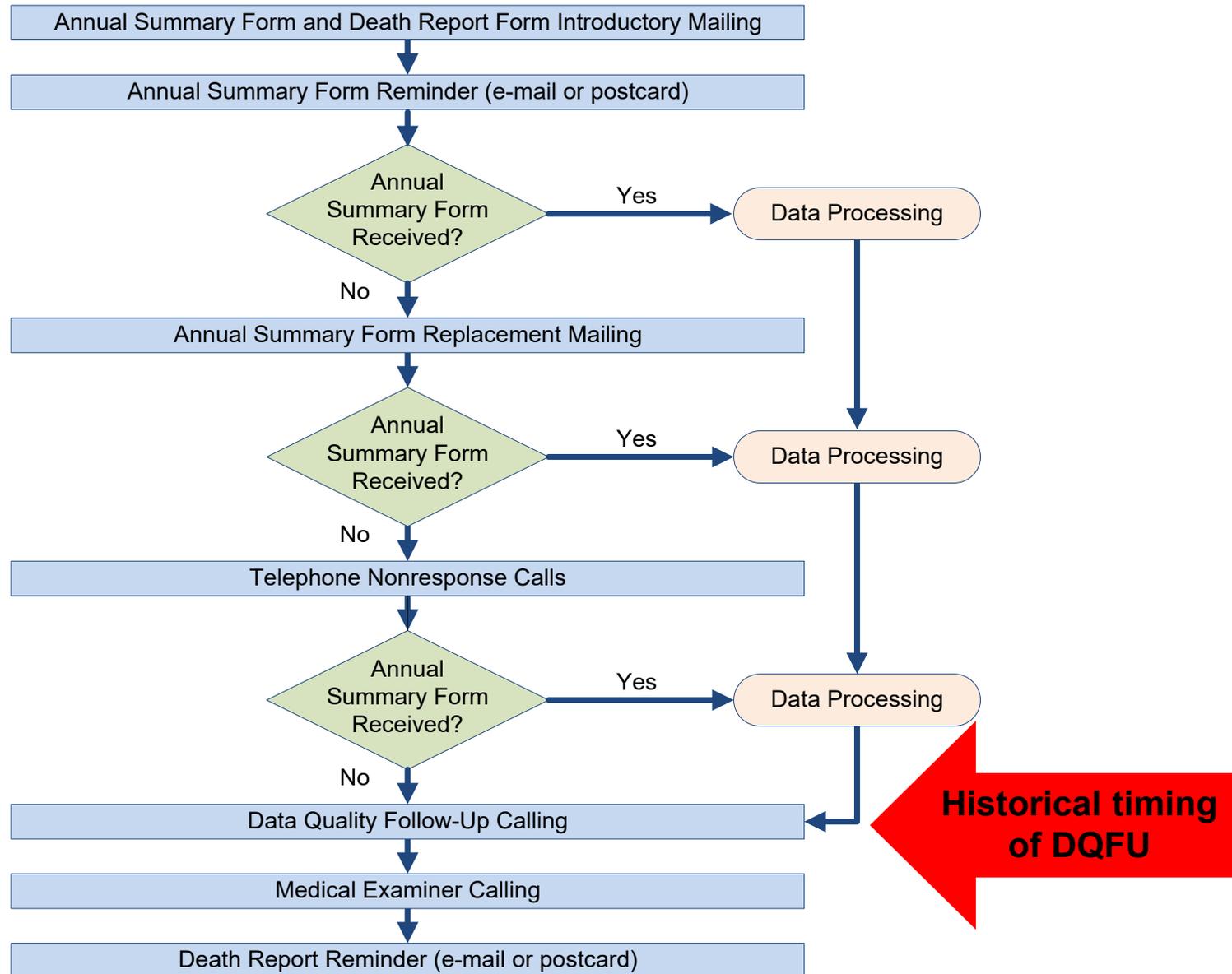


**RY2015-2016 MCI-ASJ**

## **DQFU = Data Quality Follow-Up**

- **MCI and ASJ DQFU**
  - Post-data submission contacts to agencies
  - Focused on outstanding data quality issues
    - More involved than question-level web validation
    - Cross-variable or even cross-form consistency checks
    - Cross-year comparisons, given time-series nature of collection
  - Conducted by project team members
  - Completed via telephone and e-mail

# Overarching Data Collection Protocol for MCI-ASJ



# Historical Approach to DQFU

- Traditional DQFU
  - June–July of collection cycle
  - Initiated after the bulk of national data received
- Challenges of Traditional DQFU
  - Delayed contact with early responders (up to 4.5 months)
  - Potential change in agency data suppliers (e.g., attrition, transfer)
  - Limited window of time for DQFU
    - Required relatively high number of staff
    - Increased per person costs (e.g., training hours, management time)
- Potential benefits of Early\* DQFU
  - Greater ease of correcting the data (respondent recall, recency effect)?
  - Improved agency- and item-level resolution rates?
  - Improved efficiency of making agency contacts?

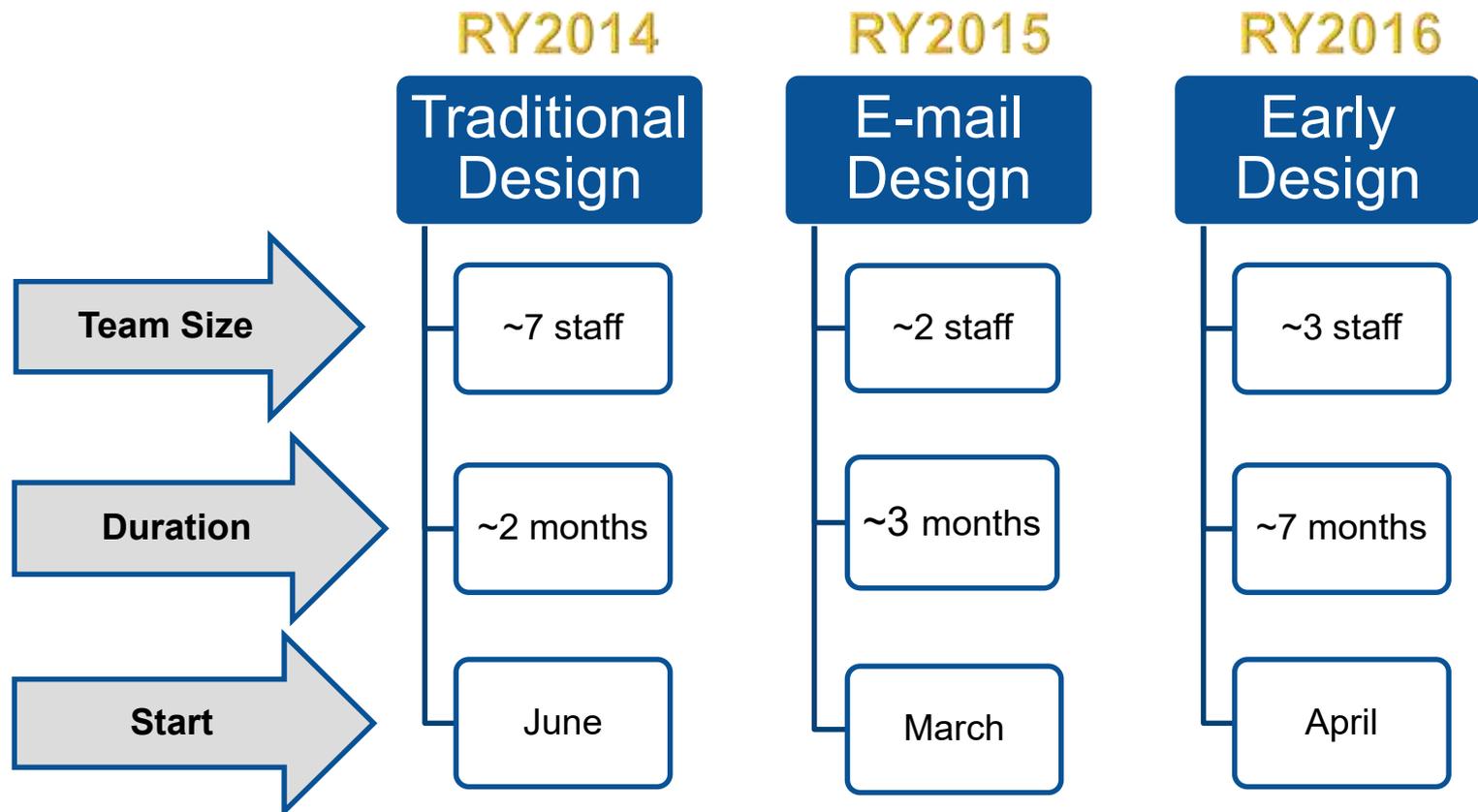
\* Initiating DQFU within 2 weeks of data submission throughout data collection window.

# Research Questions

1. Will data quality throughout data collection be enhanced through earlier, real-time contacting of responding agencies?
2. For agencies undergoing Early DQFU, what impact is there on time-to-contact and time-to-resolve?
3. Will conducting DQFU over an extended period, versus a compressed period, lead to lower cost per case resolutions?
4. What impact will doing DQFU on a continual basis, starting earlier in the collection schedule, have on project planning and resources?

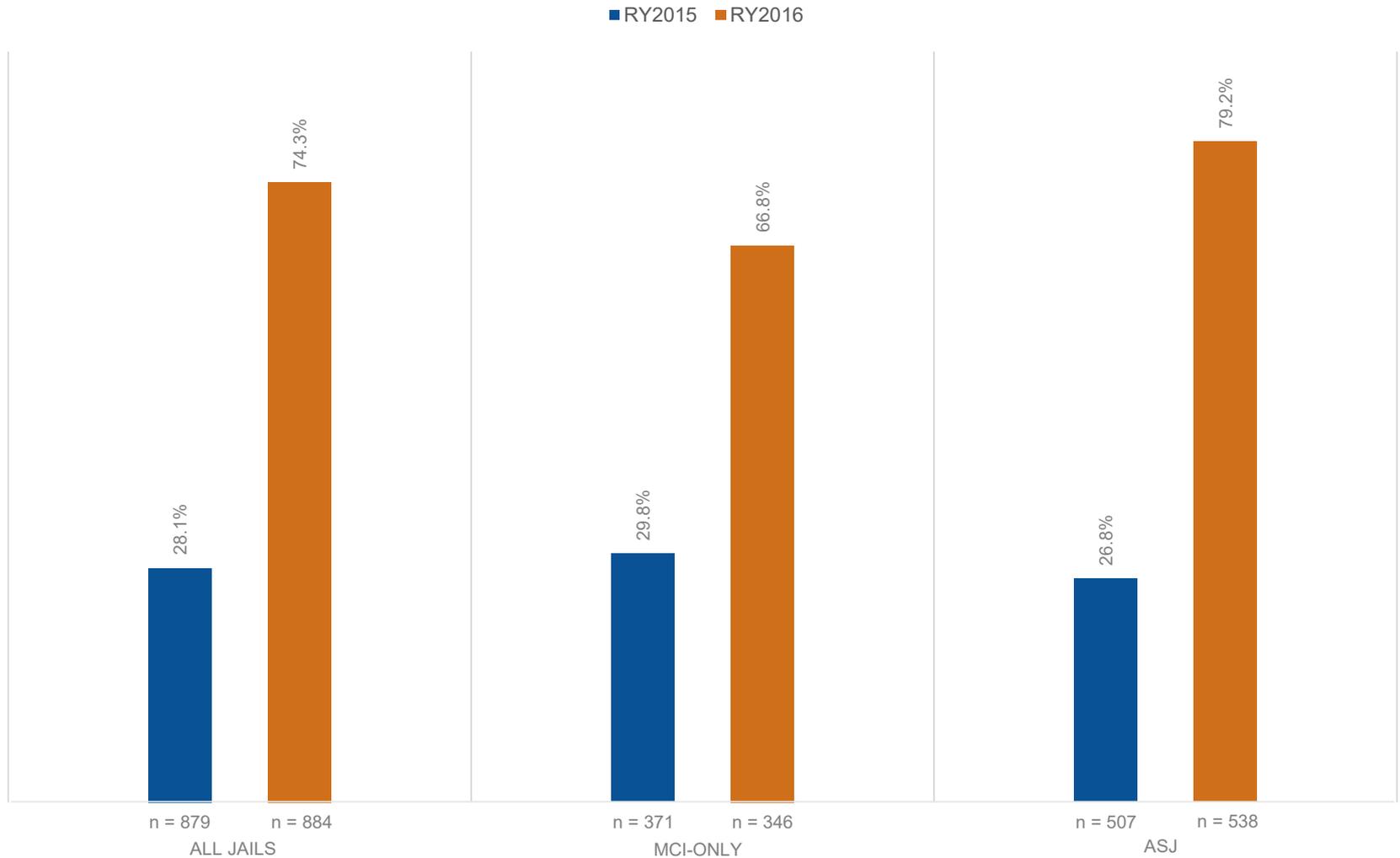
# Two-Stage Redesign of DQFU

- Initial pilot of Early DQFU for RY2015
- Full implementation of Early DQFU for RY2016



# Local Jails: Early DQFU Application

## PERCENT OF DQFU CASES RECEIVING EARLY DQFU



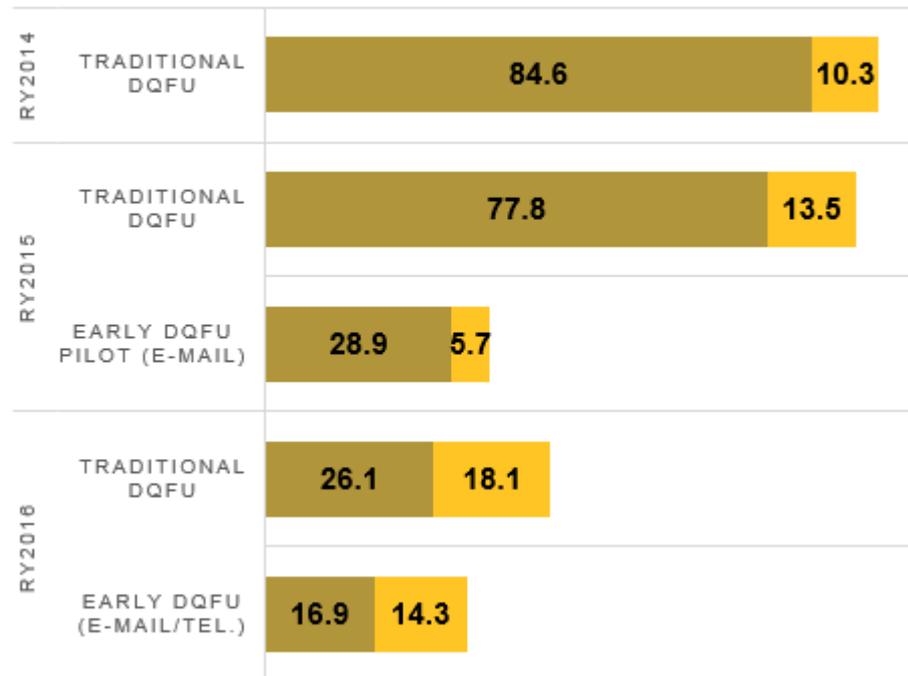
# Results of Full Implementation of Early DQFU Protocol

# Local Jails: Time From Response to DQFU Contact

- Early DQFU is resulting in
  - Contact to agencies closer to their initiation of forms
  - Sooner initial contact with agency during the DQFU period
- Traditional DQFU contact times are also improved
  - Still needed for partial responders
  - Times likely benefitting from most cases going through Early DQFU
- Overall, Early DQFU is resulting in earlier contact to all agencies

## AVERAGE ELAPSED DAYS

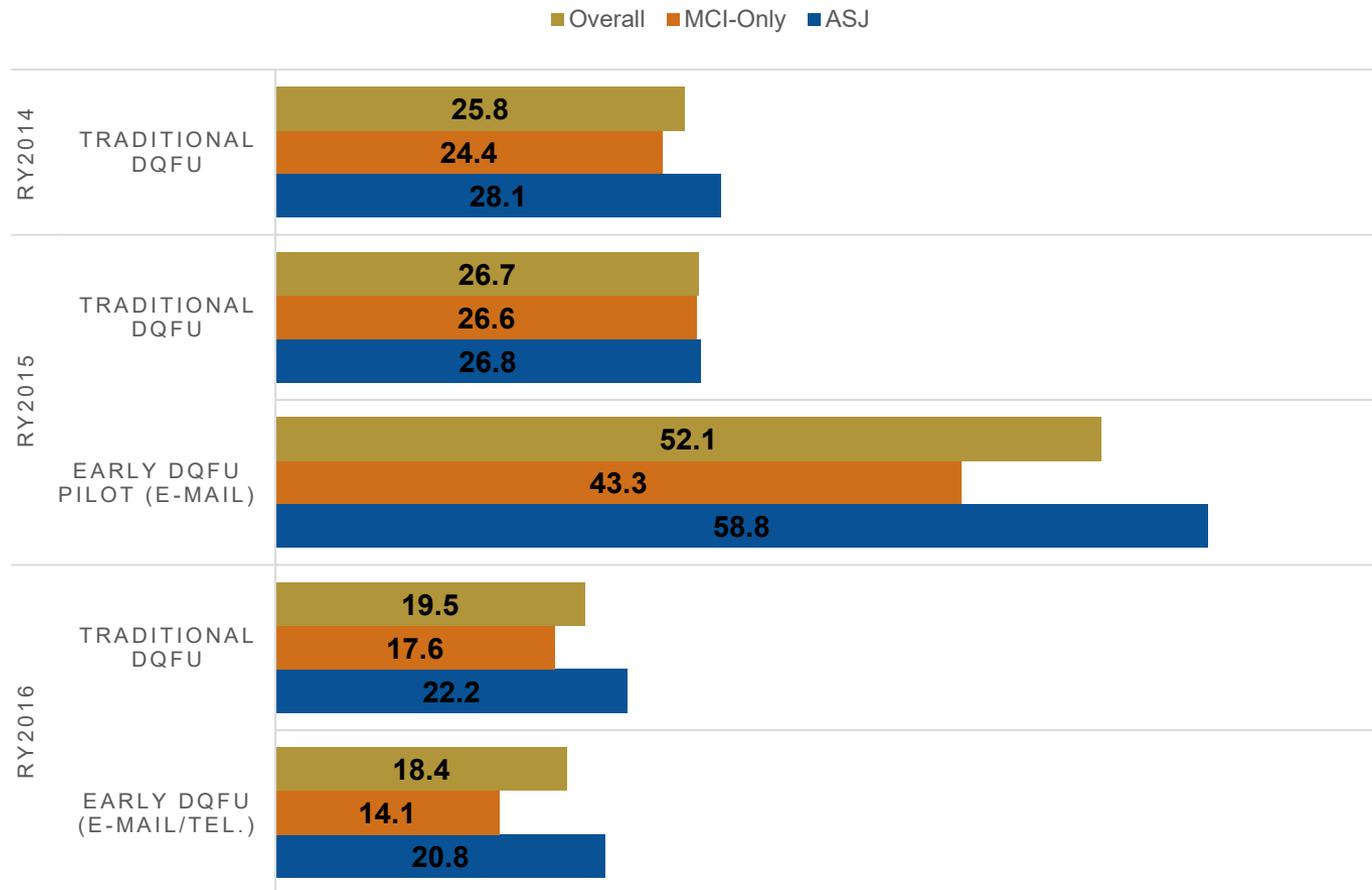
■ ASF Start to DQFU Start   ■ DQFU Start to 1st DQFU Contact



*Average Annual Summary Form start date was 30 days later in 2016 than 2014 and 2015 because of timing of launch.*

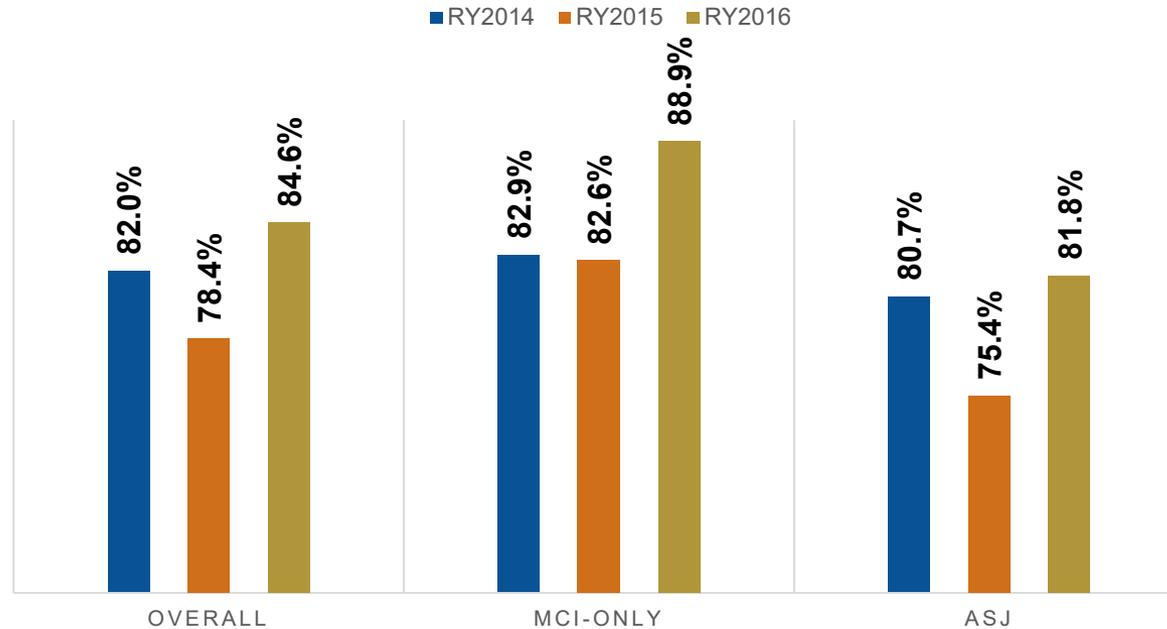
# Local Jails: Time From First DQFU Contact to Resolution

## AVERAGE ELAPSED DAYS FROM FIRST DQFU CONTACT TO RESOLUTION



# Local Jails: Resolution of DQFU cases

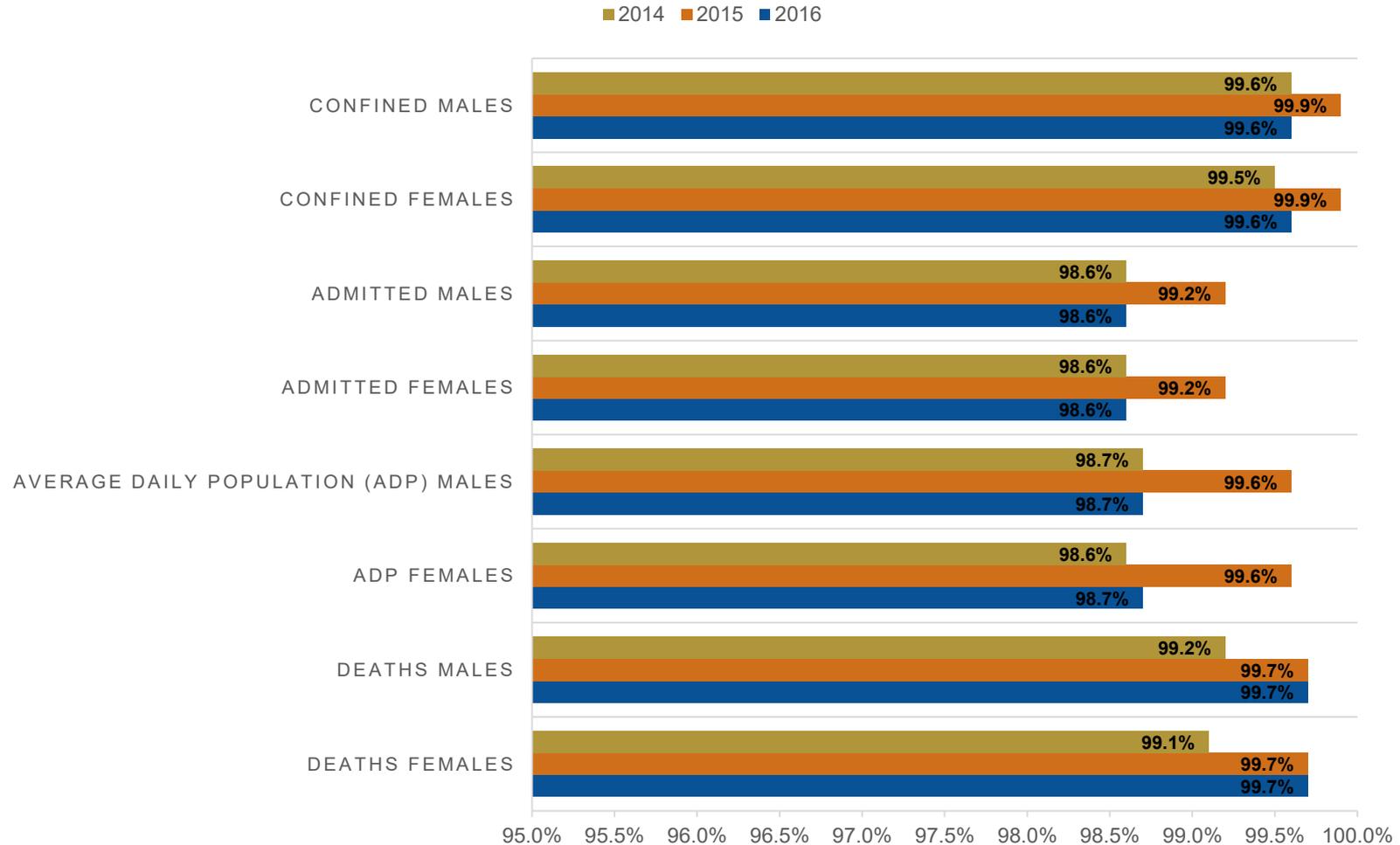
## CASE RESOLUTION RATES



- Compared to 2014, resolution rates for 2015 DQFU cases decreased (-3.6%)
  - 2015 was initial integration of ASJ with MCI, so likely primary factor
- 2016 rates were the highest across all three comparison groups

# Local Jails: Item Response Rates, Selected ASF Items

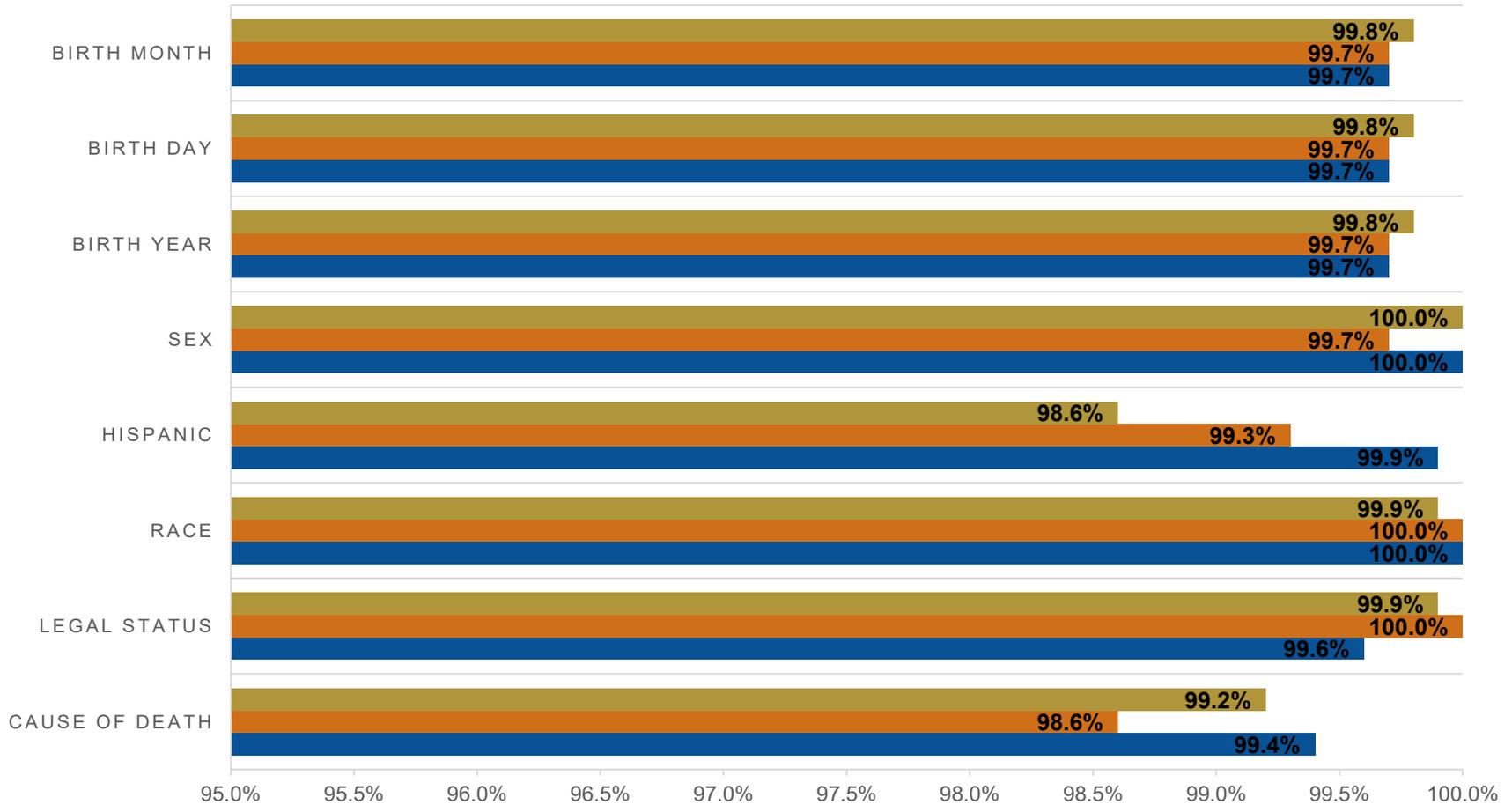
## FINAL ASF ITEM RESPONSE RATES



# MCI: Item Response Rates, Selected Death Record Items

## FINAL DEATH RECORD ITEM RESPONSE RATES

■ 2014 ■ 2015 ■ 2016



# DQFU Resolution Rates & HPC (Hours per Complete)

- **RY2014** – Traditional DQFU; MCI-only (short form)
- **RY2015** – Early DQFU followed by traditional DQFU, MCI/**ASJ**
- **RY2016** – **Early DQFU** followed by traditional DQFU, MCI/**ASJ**

	<b>RY2014</b>	<b>RY2015</b>	<b>RY2016</b>
<b>% Resolved</b>	82%	78.4% 	84.6% 
<b>Hours per Case</b>	0.71	0.98 	0.85 

# Lessons Learned

# Lessons Learned – What Defines a DQFU Case

- New Early DQFU protocol required redefining when cases could/should be worked:
  - Had the agency submitted all of their data?
    - If an agency was still working on their form, for example, we don't want to ask them about data quality errors just yet.
  - Had we (RTI) completed our internal review of the data?
    - MCI reviews all text fields to facilitate recoding.
    - MCI reviews all reported causes of death (COD) to ensure that information provided is sufficient for medical coding.

# Lessons Learned – What Defines a DQFU Case (cont.)



**Lesson Learned: Be organized!**

# Conclusions

# Conclusions

1. Will data quality throughout data collection be enhanced through earlier, real-time contacting of responding agencies?
  - As measured by resolution of cases needing DQFU
    - Average RY2016 resolution rates for local jails improved compared to RY2015 and RY2014
    - Resolution rates improved for MCI-only and ASJ agencies from RY2015 to RY2016
  - As measured by impact on key variable item-level response rates
    - Annual summary form rates already averaged 98%-99% per item
    - With the application of the Early DQFU protocol, these rates were sustained
    - Thus, the impact of Early DQFU for RY2016 had very little impact on item-level response rates

# Conclusions (cont.)

2. For agencies undergoing Early DQFU what impact is there on time-to-contact and time-to-resolve?
  - Time from when a form was begun – Early DQFU in RY2016 resulted in contacting agencies 12 days sooner than in RY2015.
  - Time from when DQFU began until initial contact – also decreased under the new, Early DQFU methodology.
  - Time from initial contact to resolution – markedly decreased with the Early DQFU methodology.

# Conclusions (cont.)

3. Will conducting DQFU over an extended period, versus a compressed period, lead to lower cost-per-case resolutions?
- As a reminder, there was an increased resolution rate from RY2015 to RY2016
  - In addition to this boost in successful resolutions, efficiency (measured by hours per case) also improved

	<b>RY2015</b>	<b>RY2016</b>
<b>% Resolved</b>	78.4%	84.6% 
<b>Hours per Case</b>	0.98	0.85 

# Conclusions (cont.)

4. What impact will doing DQFU on a continual basis, starting earlier in the collection schedule, have on project planning and resources?
  - One significant impact was having to move DQFU-related programming up to coincide with data collection launch programming

# Conclusions (cont.)

4. What impact will doing DQFU on a continual basis, starting earlier in the collection schedule, have on project planning and resources (cont.)?
  - Starting DQFU sooner and conducting it over a longer period of time did allow for fewer staff, which
    - Decreased training hours
    - Decreased management time associated with staff count
    - Allowed for increased knowledge and experience among team
  - Conversely, a longer DQFU production period did require
    - Increased number of staff meetings (usually 1/week)
    - Increased subtask management time



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# Supplemental Slide (for Q&A)

# Historical DQFU – Number and Percent of Responders

Scope of Traditional Data Quality Follow-Up (DQFU)*	Ry2012	Ry2013 <sup>^</sup>	Ry2014
# of Responding Agencies	2,720	2,724	2,771
# of Agencies At Start of DQFU	655	1,434	1,072
% of Agencies At Start of DQFU	24%	53%	39%

*\* As of June, which is typically the start date of DQFU.*

*~ Ry2012 DQ machine edits involved less year-to-year comparing of data.*

*^ Ry2013 combined MCI/DCRP and the Census of Jails, which increased the number of forms and variables per form being requested.*