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Oral Health Data in CAREWare: Process optimization – the Baltimore EMA Experience

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Background

- Oral health needs of RWHAP participants is often pointed out as a critical need. It is characterized by:
  - high dental caries
  - high periodontal disease
  - important oral mucosal lesions
  - high need for dental fillings
  - high need for dental extractions
  - high need for replacement of missing teeth
  - high need for oral health education
  - High need for oral disease prevention intervention
- Oral health needs in HIV/AIDS impact nutrition as well as early signs of viral load suppression failure.
- Unmet (and met) oral health needs of RWHAP participants are neither well documents nor well measured.

DATA MATTERS

- Oral health data for RWHAP resides in CAREWare (CW)
- Oral health data barriers in RWHAP are:
  - Program-wide; and
  - CW-wide (structure & rules)
- Inadequacy of data reported in CW
- Generic data errors
- Between-provider data variability
- Within-provider data non-reliability
- Data quality problems

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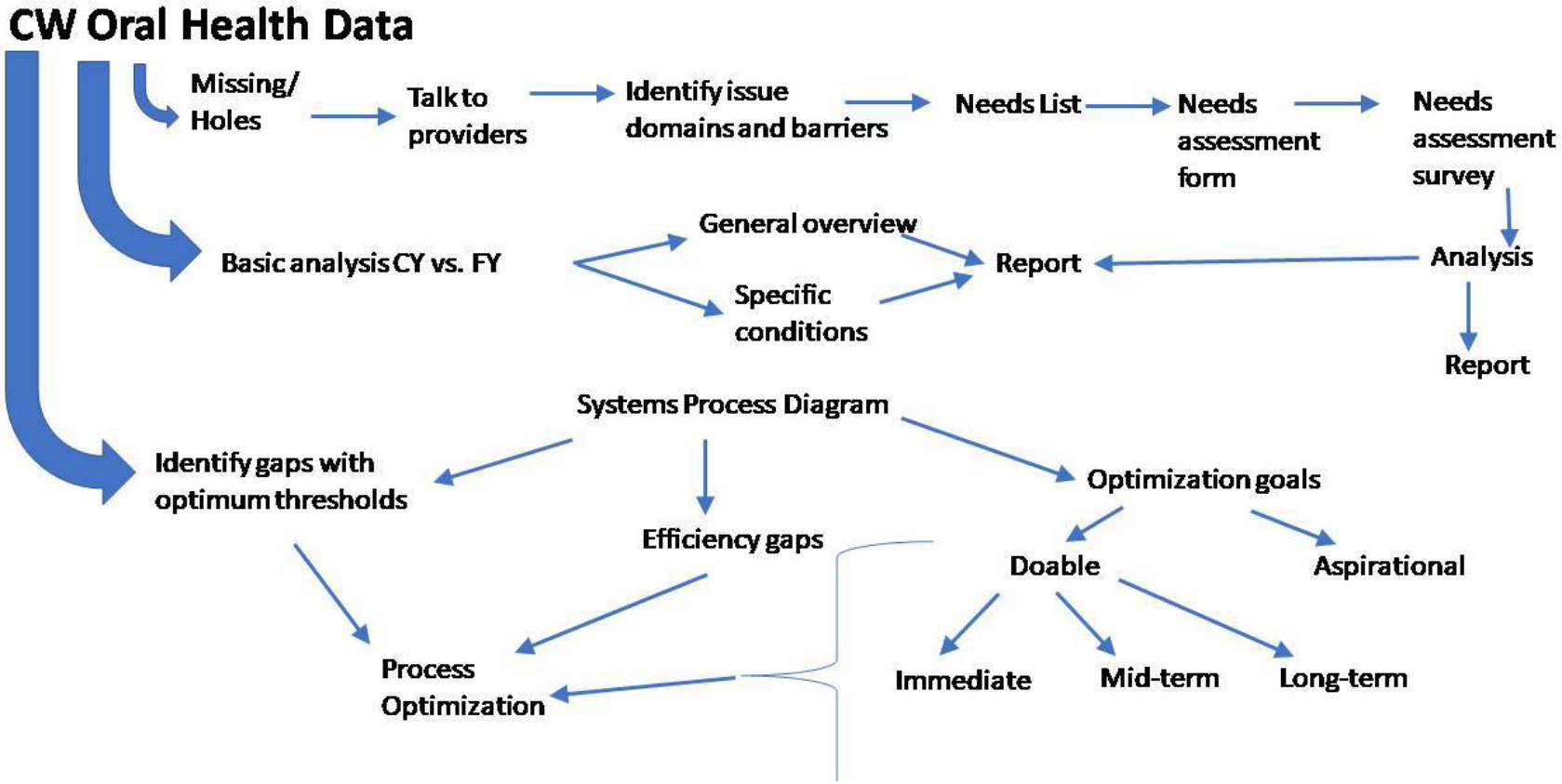
Materials & Method

OBJECTIVES
To document, describe and assess oral health processes and outcomes of Baltimore EMA RWHAP participants.

METHODS

- Baltimore-EMA CW data since 2017
- Oral health data was analyzed using standard quality improvement methods as a business-process-optimization exercise. Data quality was assessed by:
  - data gaps (missing data) identified and assessed
  - reasons for missing data were researched
  - comparison reference: Published HRSA oral health reports.
- Normative data needs identified.
- A SWOT analysis for data processes in CW aiming for process improvement.



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Results

- About 85% of all-possible oral health data was missing.
  - Random as well as non-random.
  - Similarly missing pattern across providers.
  - Specific differences between providers.
- Data deficiencies involved all data characteristics dimensions:
  - accuracy
  - completeness
  - timeliness
  - validity
  - precision
  - reliability
- Data deficiency attributes varied widely across different variables.
- Total availability of data was too little for confident, meaningful and comprehensive analysis oral health status of RWHAP participants which is the key oral health outcome to drive service related policy for RWHAP.

Key question: Causes/ reasons for data gaps/ problems

- Why is such a large amount of data missing?
- Why are the providers unable to submit full data
- Is the provider able to submit data in time? If not, why?
- Why didn't we anticipate the potential problem the service provider is facing?
- Why haven't we built a simple analytical tool for data tracking and follow-up?
- Why aren't we offering new product/ guidance/ training to find and addressing data gaps?

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Results 2

- Strategies are being drawn for conducting stakeholder analysis and develop value-alignment assessment prior to further detailed functional analyses for oral health data-optimization in CW.

SWOT Analysis for process improvement in working with providers for better data quality

- Strengths
  - Fund provider
  - Regulatory power
  - Analytical and guidance ability
  - Will to help and support
  - Quick decision-making
- Opportunities
  - Optimal service provision
  - Smooth working logistics
  - Health status improvement
  - RWP oral health program optimization
  - Public health improvement
  - Optimal $ ROI
  - Improve RWP data quality (locally and nationally)
- Weaknesses
  - Provider dependence
  - Provider compliance
  - Provider inertia
  - Possible trust issues ($ target as fund provider)?
  - Provider training
  - Provider data fill-in time?
  - No structured strategy
- Threats
  - Loss of provider
  - Inadequate service
  - Poor service quality
  - Higher patient dissatisfaction
  - Poor patient participation
  - High patient unmet needs
  - Poor health status of the population

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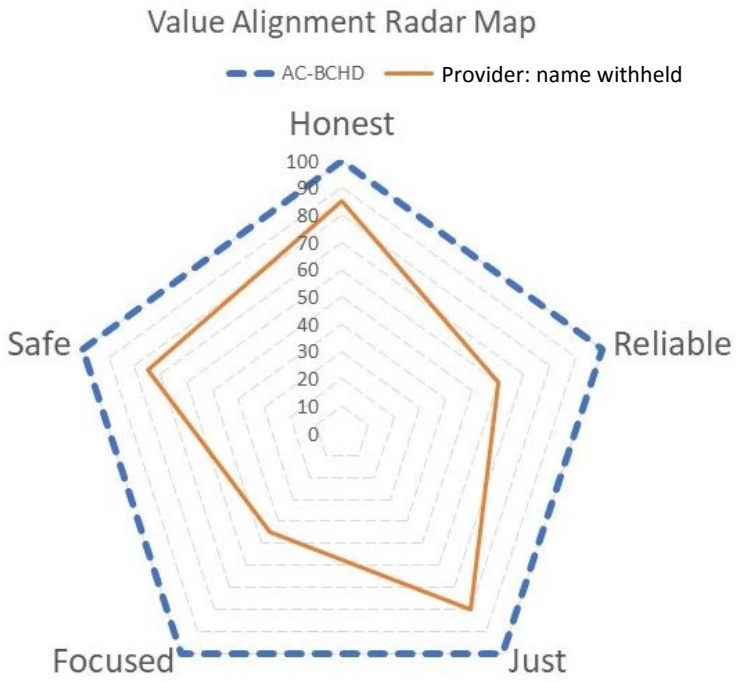
Results 3



Goal: To improve business process through step-changes instead of over all minor continuous quality improvement. Main steps of process optimization:

1. Initiating
2. Planning
3. Documenting
4. Analyzing
5. Designing
6. Implementing
7. Managing

Data gathering: CAREWare data/ telephonic interviews and stakeholder questionnaires

Stakeholder analysis: Provider authority command chain, power structure, influencers, support assessment

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Conclusions & Next Steps

CONCLUSIONS

- RWHAP outcome focuses on viral-load suppression.
- Currently available CW data policy does not permit key assessments of RWHAP participants' oral health needs.
- Voluntary oral health data reporting is a key barrier to understanding/ tracking the oral health status of RWHAP participants

NEXT STEPS

- Engage with providers about their oral health data and CW understanding, capacity, and state or preparedness for process improvement.
- Questionnaire to assess these matters has been prepared.
- Questionnaire to be sent to providers soon.
- Analysis of the data generated from questionnaire…

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