

Data Harmonization Efforts Across the Cancer Staging System

Donna M. Gress, RHIT, CTR
AJCC Technical Specialist



Objectives

- Describe efforts underway to harmonize data elements and concepts used in cancer staging
- Discuss creation of common definitions and measurements for consistent capture of data
- Discuss creation of biomarker documentation and clinical use for consistent recording of data

Identified Need

- Awareness of ambiguity of terms
- Differences between agencies and countries
- Differences between AJCC 7th edition chapters

Identification of Terms

- Identify common terms between AJCC chapters
- Review definitions for differences
- Assess other differences
 - Measurements
 - Standard vs. varies for interpretation of results

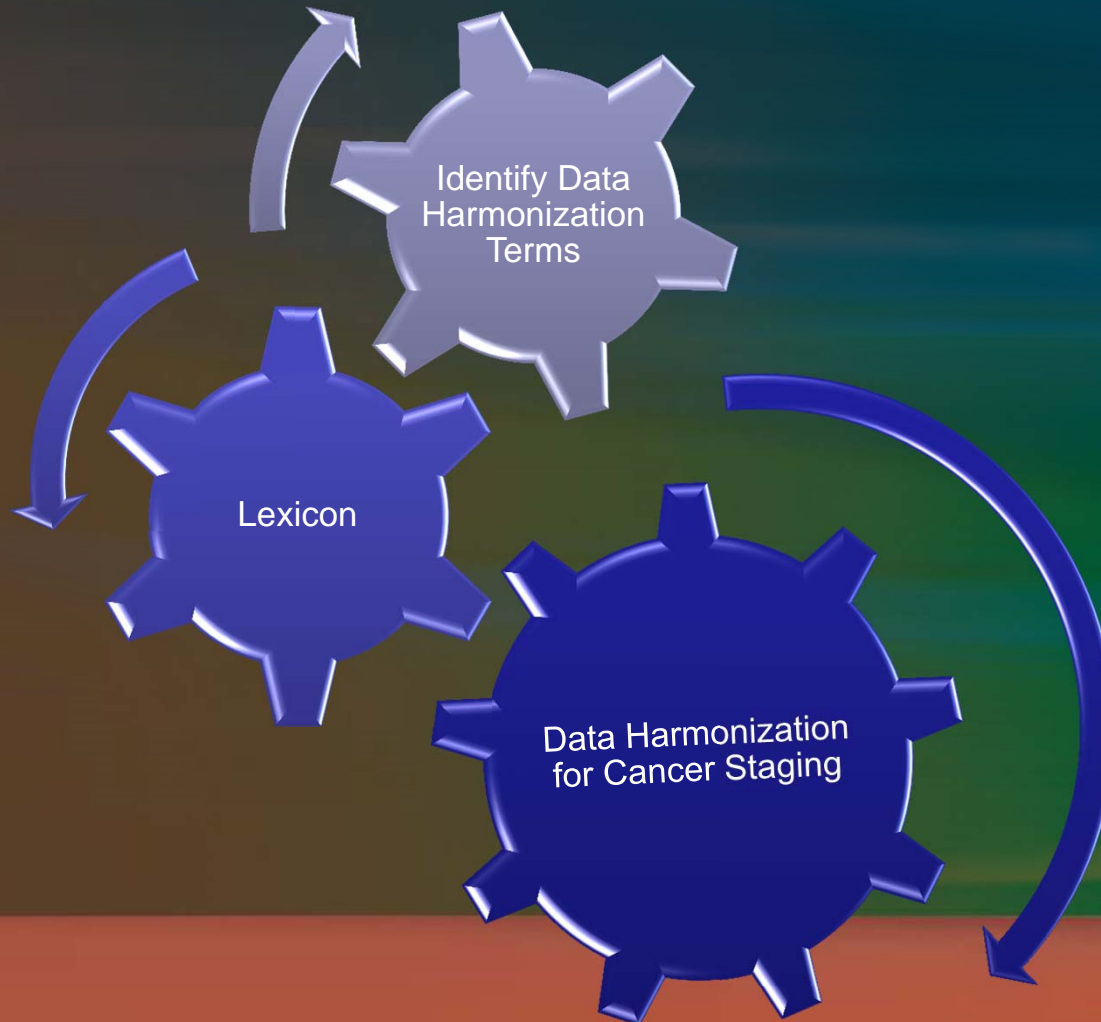
Identification of Concepts

- Identify common concepts among AJCC chapters
- Review potential differences
- Assess methods of documentation
 - Definitions
 - Standard scoring systems

Examples

- Terms
 - Mitotic rate, mitotic count
 - Measured per mm² or per HPF
 - GIST, NET, pancreas, melanoma
- Concepts
 - Response to neoadjuvant therapy, tumor regression score
 - CR, PR, scores 0-3, scores 4-1, other scoring systems
 - Rectum, breast

Integration of Projects



Lexicon Project

Goal

international harmonization and understanding of terminology around cancer terms and concepts used in staging and prognostic factors

Lexicon Project

- Define a taxonomy of common language
- Initiate dialogue with worldwide community
 - Medical Organizations
 - Physician experts
- Publish definitions of cancer staging terms

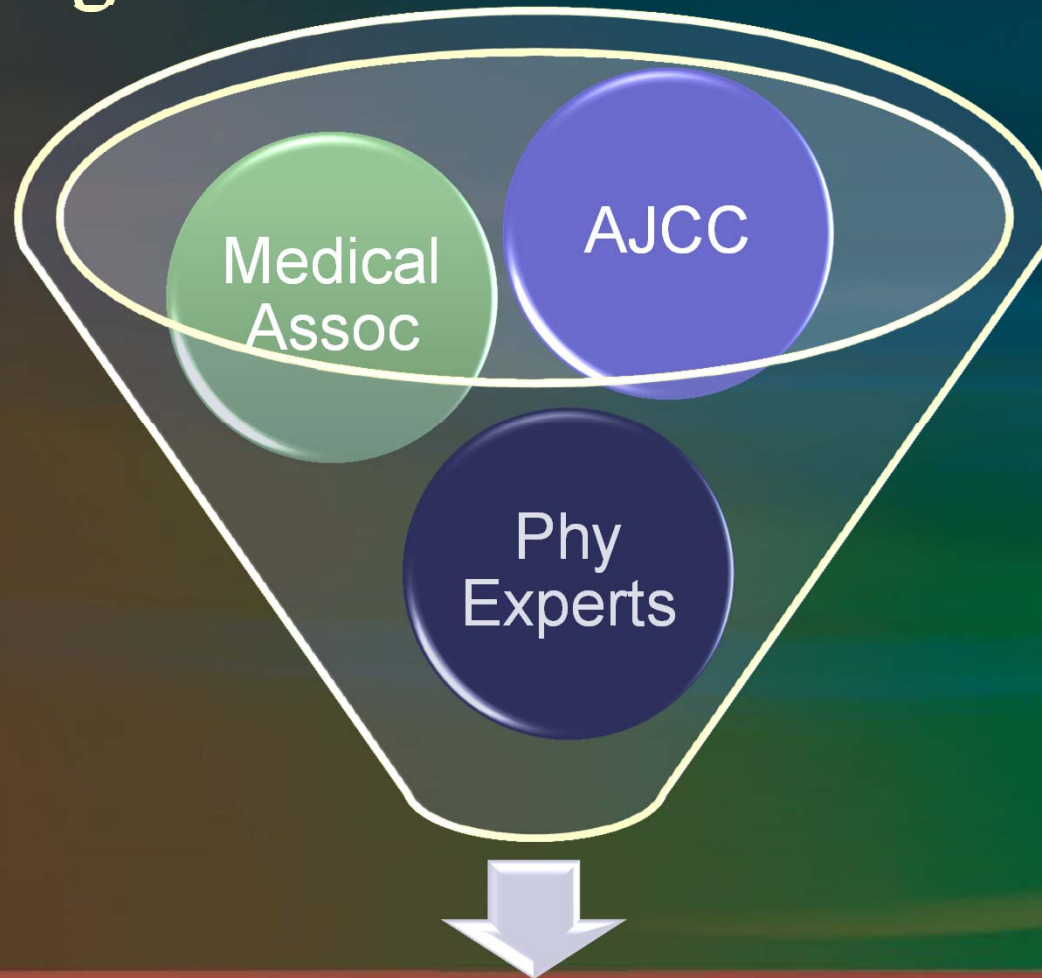
Definitions and Measurements

- Review existing information
- Look for industry standards & guidelines
- Includes
 - Method of measurement – quantitative
 - Interpretation – qualitative
 - Clear anatomic parameters for pathologists

Collaboration with Data Dictionaries

- Investigate existing definitions and documentation
- caDSR – collection of data elements – describes variable and permissible answers
- National Library of Medicine & other enterprise systems
 - NCI EVS (Enterprise Vocabulary Service)
 - NCI Thesaurus, MedDRA, SNOMED-CT

Achieving Consensus



International Consensus



Biomarker Documentation

- Review existing guidelines
- Partner with other agencies to add necessary information
- Includes
 - Which patients are appropriate
 - Timing – diagnostic workup, after surgery
 - Where to find the results (lab, path report)
 - Method of measurement – quantitative
 - Interpretation – qualitative

Biomarker Clinical Use

- Scenario specificity – criteria for use, type of case
- Predictive – choose treatment
- Prognostic – outcomes

Use in AJCC 8th Edition

- Consistency between chapters
- Clear documentation of data element
 - Definition
 - Explanation of usage, patient selection
 - Quantitative and qualitative levels
- Rationale for any differences

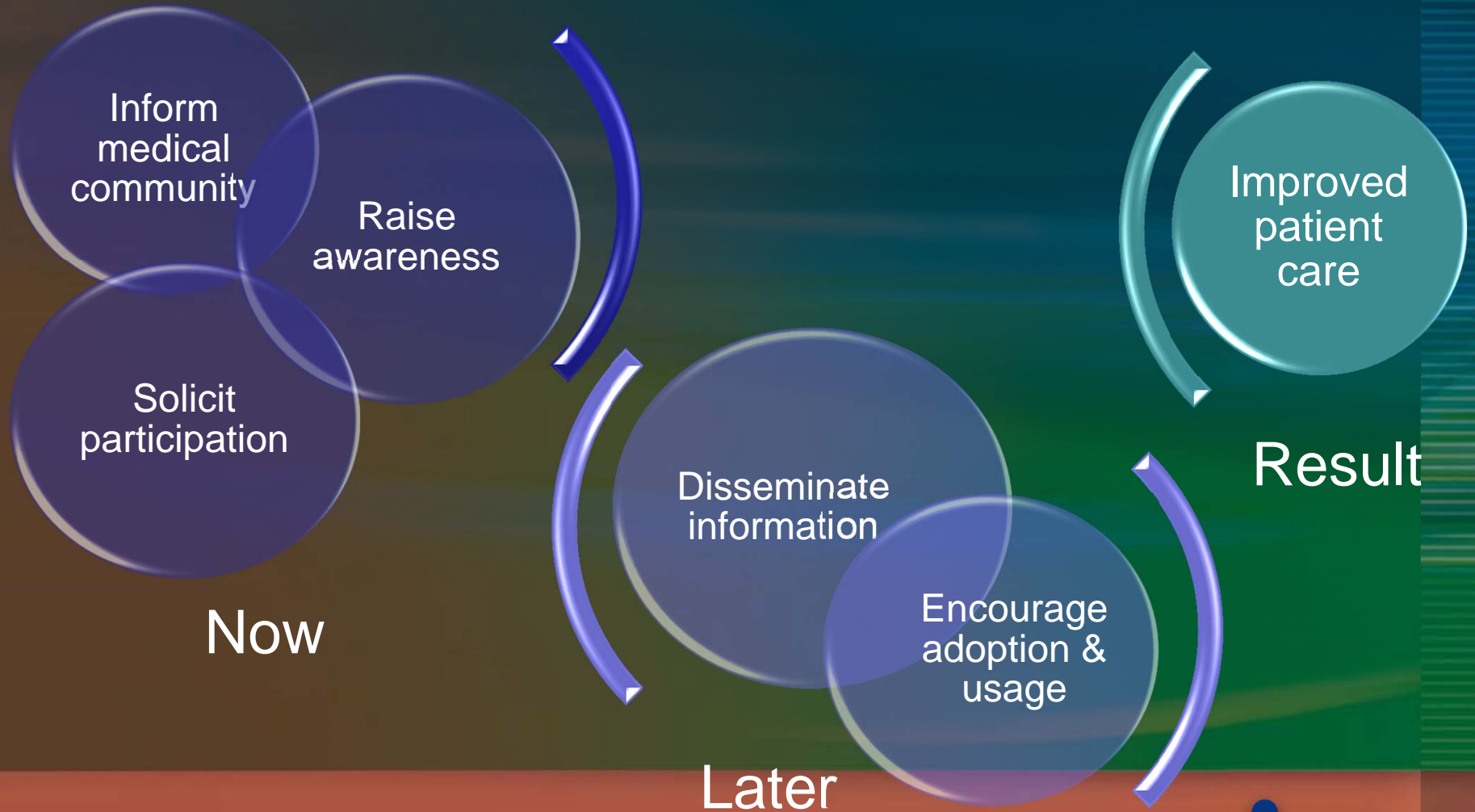
Data Capture

- Consistent expression in medical record
 - Same terminology
 - Standard quantitative values
 - Standard qualitative values
 - Clear documentation when variability exists
- Data analysis depends on consistency
- Future: ability to capture data from electronic sources for cancer registry

Recording Data

- Recognize cases appropriate for biomarkers
- Record results prior to treatment or after
- Specific criteria for multiple tests
 - Different results
 - Necessity of additional test confirmation
- Assist registrar in understanding
 - When to look for data
 - When test will not be done

Education

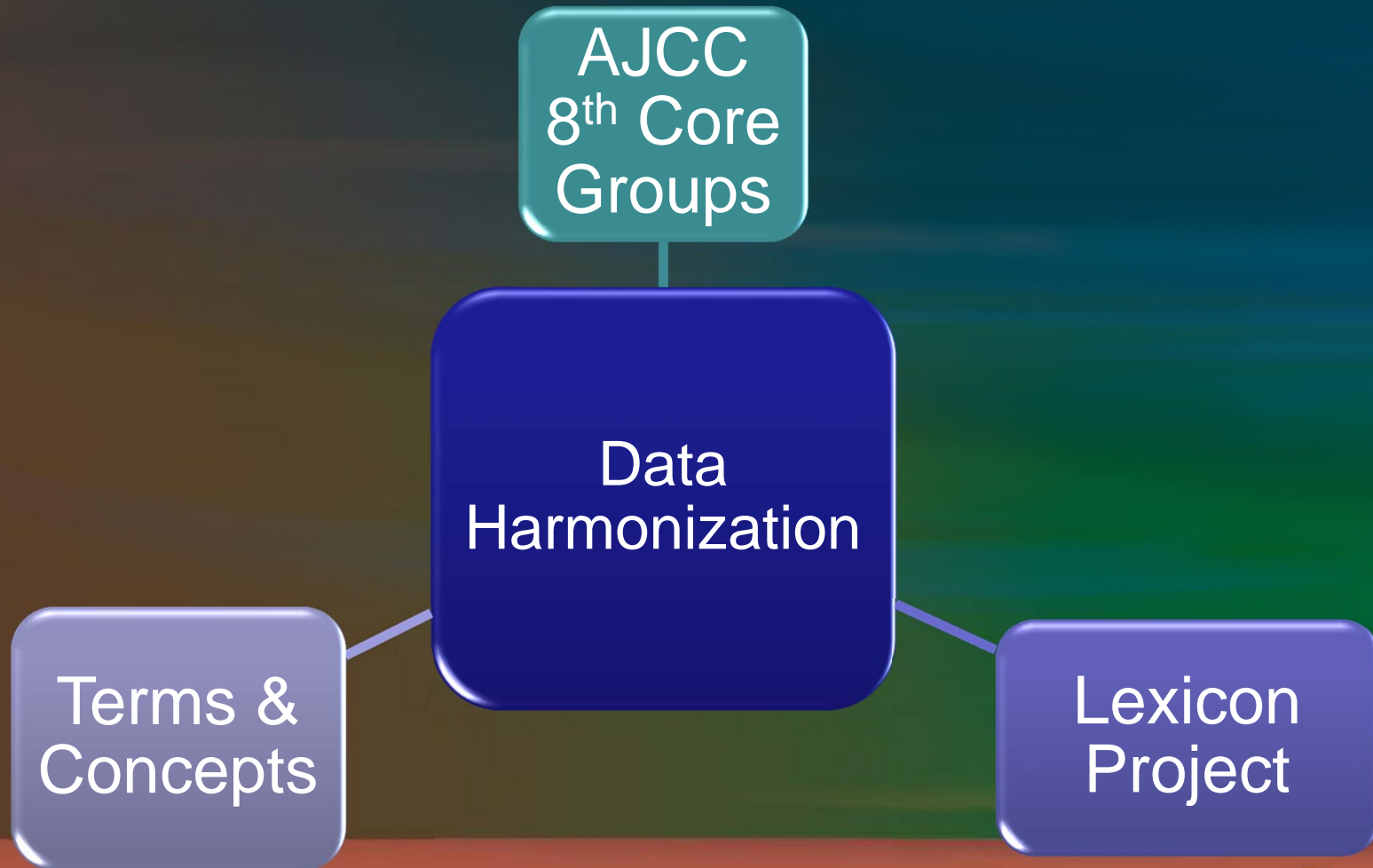


Now

Later

Result

Next Steps for Data Harmonization



Questions



No materials in this presentation may be repurposed without the express written permission of the American Joint Committee on Cancer. Permission requests may be submitted at CancerStaging.net.

