

Supplemental materials for:

Guetterman TC, Feters MD, Creswell JW. Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *Ann Fam Med*. 2015;13(6):554-561.

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**Supplemental Table 1. Integration and Joint Displays Used in Explanatory Sequential, Exploratory Sequential, and Intervention Designs**

<b>Authors</b>	<b>Purpose</b>	<b>Mixed Methods Rationale</b>	<b>Qualitative Data Sources</b>	<b>Quantitative Data Sources</b>	<b>Integration</b>	<b>Analytic strategies</b>	<b>Joint Display</b>
<b>Explanatory Sequential Designs</b>							
*Finley et al <sup>1</sup>	Develop/validate scale to assess staff and clinician relationships in PC	Triangulate	Observations, interviews of clinicians, staff	Work Relationship Scale (WRS)	Connecting Merging	Joint display Narrative	Table 4 relates quotes to WRS scores, theory
Zeng et al <sup>2</sup>	Investigate lived experiences of older persons with depression in Macau	Confirm or reject quan inferences, expand findings	In-depth interviews with older persons	Scales - depression, mental status, social net., ADLs, QoL	Building Merging	Joint display Narrative	Table 3 maps qual categories to quan scales
Petros <sup>3</sup>	Investigate support needs of older persons caring for children with HIV/AIDS	Enrich results and capture nuances	Interviews of caregivers, government, and NGO	Survey caregivers on knowledge, caregiving, support	Connecting Merging	Joint display Narrative	Figure 1 maps findings to policy recommendations
<b>Exploratory Sequential Designs</b>							
*Haggerty et al <sup>4</sup>	Develop/validate a generic measure of care management continuity	Multiple perspective	Meta-summary of themes of 33 qual studies	Instrument - continuity of care	Building	Joint display Narrative	Table 2 relates qual to items
Nutting et al <sup>5</sup>	Examine barriers to guideline-concordant acute-phase care for individuals with major depression	Not specified	Interviews of physicians and nurses	A checklist of barriers to depression care	Building	Joint display Narrative	Table 2 arrays qual derived barriers and quan cluster analysis
<b>Mixed Methods Intervention Design</b>							

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*Shaw et al <sup>6</sup>	Evaluate a primary care practice quality initiative to improve colorectal cancer screening rates	Richer understanding	Observations, recording of RAP, learning collab., interviews	CRC screening rates based on medical record review	Merging	Joint display Narrative	Table 5 arrays qual implementation practices by quan screening rate
*Bradt et al <sup>7</sup>	Compare effects of music therapy versus music medicine interventions on psychological outcomes and pain in cancer care	Greater understanding, participant experience in their own words	Interviews with patients	Visual analog and numeric ratings of mood, anxiety, relaxation, pain	Merging, embedding	Joint display Narrative	Table 4 organizes results by treatment-benefit types, align change and experiences

#### Supplemental Table 1 References

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**Supplemental Table 2. Integration and Joint Displays Used in Convergent Designs**

<b>Authors</b>	<b>Purpose</b>	<b>Mixed Methods Rationale</b>	<b>Qualitative Data Sources</b>	<b>Quantitative Data Sources</b>	<b>Integration</b>	<b>Analytic strategies</b>	<b>Joint Display</b>
<b>Convergent Designs</b>							
Andrew et al (2008) <sup>1</sup>	Examine BSN student attrition and retention	Reasons for student responses	Open-ended survey items	Academic Persistence Scale-adapted for nurses	Merging	Joint display narrative	Table 2, Table 3 array categorical data-by-themes
Devoe et al <sup>2</sup>	Identify barriers of low-income parents to accessing health care for children	Capture experiences of families	Open-ended items of healthcare access survey	Survey - health-related issues	Merging	Joint display narrative	Table 4 of demographic statistics by themes
Wittink et al <sup>3</sup>	Understand concordance and discordance between physicians and patients about depression status	Link themes to personal characteristics and measures	Semi-structured interviews with patients	CES-D, Beck Anxiety Inventory, Physician Rating	Merging	Joint display Narrative	Table 3 of statistics-by-themes
Panda et al <sup>4</sup>	Examine discrimination, HIV stigma in West Bengal	Complementarity, different perspective	Interviews on discrimination; focus groups	Surveys-stigma	Merging	Joint display Narrative	Table 5 qual quan side-by-side
*Dickson et al <sup>5</sup>	Explore knowledge and cognitive function influence on heart failure self-care	Complementarity, explain	Interviews of individuals providing self-care	Scales-knowledge, psychomotor, memory, self-care	Merging	Joint display Narrative	Table 3 cross case (qual and quan) by domain
Kennett et al <sup>6</sup>	Understand how resourcefulness is	Understand complex and	Interviews about self-management	Self-Control Schedule -	Merging	Joint display	Table 3 arrays levels of SCS

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	reflected in self-management of pain among program clients	dynamic topic	of pain	learned resourcefulness		Narrative	by themes/quotes
Andrew et al (2011) <sup>7</sup>	Understand patients' satisfaction ratings and practice implications	Completeness	Brief patient interviews; two open-ended items	PQS-7 - satisfaction	Merging	Joint display Narrative	Table 2 arrays PQS-7 tertiles by themes/quotes
Pluye et al <sup>8</sup>	Describe family physicians' information use and estimate NNBI for knowledge resource	Systematic, comprehensive case description	Observation, log reports, archives, interviews of physicians	IAM questionnaire	Connecting Merging	Joint display Narrative	Figure 4-clinical vignettes and path diagram
Meurer et al <sup>9</sup>	Explore how to best use adaptive clinical trial designs	Understand beliefs and concerns too	Open text response to survey, mini-focus groups	Visual Analog Scale (VAS) scores	Merging	Joint display Narrative	Figure 1 arrays VAS scores with text responses using color
<b>Convergent Designs with Data Transformation Variant</b>							
Freund et al <sup>10</sup>	Explore complex causality of hospitalizations for ACSCs	Not specified	Interviews of physicians; case audits	Data trans. descriptive analysis	Embedding	Narrative, data trans.	Table 2 displays data transformation
Scott et al <sup>11</sup>	"Characterize and compare communication patterns in primary care practices"	Capture quantitative aspects of relationship patterns	Interviews, observations of staff, clinicians, participants; documents	Social network adjacency matrix	Merging	Data trans.	Figure 2 network diagram quantized for analysis
Tarn et al <sup>12</sup>	Test intervention to improve physician-patient communication about new meds	Qualitative added actual visit content	Transcripts of patient visits	Survey - communication, trust, health literacy	Merging	Data trans.	Table 4 of data transformation

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## Supplemental Table 2 References

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