



Concepts into Creation of the YFIRES Case Management Database

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A large group of multidisciplinary stakeholders from across the U.S. (see "Contributing Partners") utilized an intensive strategic process to select the data elements included in the YFIRES local case management components database. Review the following to learn more about this multi-step process.

- A methodical strategic approach was applied throughout the YFIRES development process. Results from three national surveys were incorporated into database development (details below):
 - YFS Existing Database Survey included in "Need for Standardized Youth Firesetting Data Collection and Prevention Education: Initial Findings from Two National Pilot Studies"¹
 - YFSI Provided by Burn Centers and Partnering Agencies²
- Comprehensive assessment with extensive multidisciplinary and multiagency stakeholder input was conducted.
- Strategically overcame the barrier of no (or very minimal) current standardization of terms, definitions, required minimal data sets, structure of YFS interventions, etc. In other words, there is wide variability in disciplines/professionals, structure of YFS "programs," purpose, data use, elements collected, etc. (Refer to findings from national surveys below.^{1,2})
 - Incorporated current NFPA 1035 standards and National Fire Academy curriculum.
 - Utilized research literature findings, U.S. Census data reports, and expert Mental/Medical/Public Health researchers input to guide data elements construction.
 - Specific interview and assessment tool data elements were intentionally not included due to the variety of currently available and lack of consensus for which is best for universal use among programs.
- A primary operating theory was utilized during development: When in doubt, inclusion vs. exclusion of data elements that surveyed programs are using. Capacity for individualization was also incorporated, e.g., text boxes and "other" options.
- Plan for future YFIRES revisions: Pilot test findings to be included; specific guidelines developed for reviewing, obtaining user feedback, incorporating changes, and meticulous documentation of revisions to minimize potential negative impact on data.
- Database was created to support community risk reduction, standardized data collection/reporting, YFS program management/administration, and outcomes evaluation (i.e. Vision 20/20 strategies). There were also several parallel goals: supporting efficiency, minimizing workload, justifying manpower/allocating budget, etc.

National Survey Details and Results

1. YFS Existing Database Survey¹

- a. Between 2012-2013, a survey was emailed to State Fire Marshals and YFSPI programs querying the presence of local/state YFS electronic databases, software, management, costs, and data elements collected
- b. 91% (n=59/65) responded
- c. 70% of respondents (n=41/59) had no electronic database (i.e. used paper records), only used NFIRS, and/or used simple spreadsheets
- d. 36% (n=21/59) provided details on data collected

- e. Wide variability in number (mean 58, range 13-136) and type of data elements
- f. Only 1 (<2%) included data dictionary definitions for each field
- g. **Conclusions:** Results demonstrate the need for a standardized electronic YFS database. Modeling the NBR/burn registry, it should be tier-leveled to capture a minimal set of de-identified national incident data, with expanded secure fields to meet local multidisciplinary YFS program case management needs.

2. YFSI Provided by Burn Centers and Partnering Agencies²

- a. In 2009, online survey emailed to all listed in ABA's Directory for Burn Care Facilities in the U.S.
- b. 57% (n= 64/112) completed the survey, representing participation of 79% of verified burn centers
- c. 38% report having their own YFSI program and 38% refer youth to fire services
- d. Type of intervention sessions/programs: 57% individual/one-on-one (13/23); 43% group [26% exclusively group (6/23); 17% combined group/individual (4/23)]
- e. Number of intervention sessions/programs: 26% multiple (6/23); 39% single (9/23); 35% other
- f. Multiple program sessions ranged from 1 to 12 weeks
- g. **Conclusions:** Many burn units that treat pediatric patients do not have YFSI and rely on external programs operated by fire services. Existing YFSI programs vary greatly in structure and method of delivery...Study results highlight a need for burn centers to collaborate on evaluating effectiveness of YFSI programs and providing consistent intervention materials based on outcomes research.

References:

1. Klas KS, Tammaro P, Porth DW, King MM, Flamm T. Need for standardized youth firesetting data collection and prevention education: initial findings from two national pilot studies. Presented at the 2015 American Burn Association Annual Meeting.
2. Ahrns-Klas KS, Wahl WL, Hemmila MR, Wang SC. Do burn centers provide juvenile firesetter intervention? J Burn Care Res 2012;33(2):272-8.