The Home Health and Hospice Care Nurse Staffing Study (HHHCNSS) assesses nurse staffing and related issues in home health and hospice agencies. In 2017, the Texas Center for Nursing Workforce Studies (TCNWS) administered the HHHCNSS to 925 Texas home health and hospice agencies with a patient census of at least 250. Respondents provided data for 222 agencies for an overall response rate of 24.0%. These agencies were representative of Texas home health and hospice agencies by region, patient census, and agency type.

This report includes information on the design and methods of the 2017 HHHCNSS.

Survey Development

TCNWS established a taskforce consisting of nurses and directors from home health and hospice agencies, Texas Association for Home Care and Hospice (TAHCH), and Texas Nurses Association (TNA). These home health and hospice care experts served to assist in the development and implementation of the survey. The members of the HHHCNSS taskforce helped to revise and edit the survey instrument to ensure questions were applicable and understandable to all home health and hospice agencies. The taskforce also helped to test and market the survey, and reviewed the final report.

The 2017 HHHCNSS modified questions from the 2015 HHHCNSS regarding: registered nurses (RNs) on agency boards; time to fill new positions; nursing staff needs; recruitment difficulty and experiences; recruitment and retention strategies; RN degree types; and transition to practice. The question regarding the importance of a Bachelor of Science in Nursing (BSN) degree and the question regarding the economic recession were removed from the survey. The 2017 HHHCNSS added a new question regarding how the transition to practice program was coordinated. The final survey instrument contained a total of 29 questions.

The 2017 HHHCNSS survey instrument and its operational definitions are in Appendices B and C, respectively.

Survey Distribution and Marketing

The 2017 HHHCNSS launched on April 3, 2017. TCNWS emailed a link to the web-based survey along with the survey instrument, cover letter, operational definitions, and instructions to all Medicare licensed and certified home health, licensed home health, and hospice agencies, if the agency’s email was in the Department of Aging and Disability Services (DADS) database, on April 3, 2017; May 15, 2017; and June 7, 2017. Survey materials were also distributed by mail on April 3, 2017. Mailed materials included the survey instrument, cover letter, operational definitions, and instructions. In addition to mail and email, the survey instrument and cover letter were faxed on July 11, 2017 and July 24, 2017 to all agencies who had not yet responded to the survey, if their fax numbers were in the DADS database. Agencies were strongly encouraged to complete the survey online; however, faxed, mailed, and emailed submissions were also accepted.

The initial survey deadline was May 12, 2017. TCNWS extended the survey deadlines by email to June 2, 2017 and later to July 21, 2017. The final deadline of August 4, 2017, was disseminated by fax only.

Qualtrics, an online survey software, hosted the survey. In order to accommodate respondents who needed additional time, surveys were accepted through August 14, 2017 at which point the survey link was deactivated.

Strategies used to increase the survey response rate included the following:

- TCNWS and taskforce members sent email announcements throughout the survey period.
- TCNWS staff made follow-up phone calls throughout the survey period to encourage participation from non-respondents.
Surveys were faxed directly to agencies and business reply envelopes were included with the mailed survey materials. Additionally, various entities assisted in marketing the survey by sending email announcements and posting alerts on their websites. These included:

- DADS
- TAHCH
- Texas & New Mexico Hospice Organization
- TNA
- Texas Non-Profit Hospice Alliance

### Surveys

Past years of the HHHCNSS only surveyed agencies providing at least hospice or licensed and certified home health services (LCHHS). The 2017 HHHCNSS initially expanded to include agencies that provided licensed home health services (LHHS) regardless of whether they also provided LCHHS or hospice services.

During the survey period, several of the LHHS agencies (that did not provide LCHHS or hospice services) indicated they did not provide nursing services or employ nurses. At the close of the survey, the number of LHHS agency respondents was very low and the responses could not be generalized to the population of LHHS agencies. As a result, TCNWS removed these agencies from the population and excluded any survey data from these agencies from all analyses.

Another change to the population in the 2017 HHCNSS involved the patient census. The population of home health and hospice agencies only included those with a patient census of 250 or greater; past versions of the survey included all LCHHS and hospice agencies regardless of census size. The patient census for each agency was obtained from DADS and represents the number of unique clients served in a 12-month period.

### Data Analysis

All data analyses were conducted in SPSS version 24. Variables were analyzed by agency type, patient census, geographic designation, and region. Data were reviewed and notable inconsistencies were removed from the analysis.

TCNWS received 219 surveys which included data for 222 agencies within the study population. 4 surveys contained aggregated data for two or more agencies. Response rates in the Agency Characteristics report include all of the 222 agencies. Otherwise, data from the 4 surveys that contained aggregated data are only included in statewide statistics, and excluded from any analysis by region, geographic designation, agency type, or patient census. The n reported for each question reflects the number of respondents who answered that question.

### Agency Characteristics

Frequency counts were run for each variable reported in the Agency Characteristics report. Response rates were analyzed by region, geographic designation, patient census, and agency type. The proportion of respondents with RNs on their boards is also included. Because the 2017 HHHCNSS restricted the patient census to 250 and greater, 2015 HHHCNSS response rates were recalculated using the same patient census restrictions to allow for comparison between the two surveys.

### Vacancy and Turnover

The 2017 HHHCNSS asked respondents to provide the total number of occupied and vacant nursing staff positions in their agency on January 27, 2017. These numbers were used to calculate vacancy rates as described in the 2017 HHHCNSS Vacancy and Turnover report.

The facility vacancy rate describes the proportion of full-time equivalent (FTE) positions that were vacant within an agency. The position vacancy rate describes the proportion of all FTEs that were vacant across a group of responding agencies.

\[
\text{Facility vacancy rate} = \frac{(\text{Sum vacant FTEs being recruited, on hold or frozen in an agency})}{(\text{Sum occupied + vacant FTEs in an agency})} \times 100
\]

\[
\text{Statewide position vacancy rate} = \frac{(\text{Sum vacant FTEs being recruited, on hold or frozen across the state})}{(\text{Sum occupied + vacant FTEs across the state})} \times 100
\]

In order to calculate turnover rates, respondents provided the number of occupied full-time and part-time staff positions at two points in the year (January 1, 2016 and February 1, 2017) and the number of those employed in January who were employed in February. Turnover rates were calculated for full-time and part-time staff positions using the following formulas:

\[
\text{Turnover rate} = \frac{(\text{Sum positions vacated in the year})}{(\text{Sum positions occupied at the beginning of the year})} \times 100
\]

TCNWS received 219 surveys which included data for 222 agencies within the study population. 4 surveys contained aggregated data for two or more agencies.
December 31, 2016), and these numbers were averaged to determine an average number of employees. Turnover rates were calculated for each facility and by each nursing staff type by dividing the number of reported employee separations during this period by the sum of average full-time and part-time staff. The median facility turnover rate was reported for the state and for each region.

\[
\text{Facility turnover rate} = \frac{\text{Total number of separations}}{(\text{Average } \# \text{ full-time} \ + \ \text{average } \# \text{ part-time}) \times 100}
\]

For this report, vacancy and turnover rates from 2011, 2013, and 2015 were recalculated on data that only included agencies with a patient census of 250 or greater to allow for comparisons with the 2017 data. As a result, vacancy and turnover rates in this report will not match those reported in the 2011, 2013, and 2015 HHHCNSS reports.

**Staffing**

The Staffing report includes data on nurse staffing, such as the number and proportion of nursing staff employed in home health and hospice agencies. The report also discusses the degree types of RN staff, the need for additional nursing staff, and consequences of inadequate staffing.

This report used frequency counts and analyzed data by region and agency type. If applicable, inductive coding was used to analyze open-ended free response questions.

**Recruitment and Retention**

The Recruitment and Retention report includes data on recruitment, retention, and hiring practices and experiences. Respondents were asked to rank attributes they consider when hiring RNs, where RN recruitment efforts were focused, and to rate and describe their experience recruiting nursing staff. Respondents were also asked to report the average number of days it took to fill nursing staff positions and the types of recruitment and retention strategies used for full- and part-time employees.

Frequency counts were conducted for this report. Inductive coding was used to analyze open-ended free response questions.

**Transition to Practice**

The Transition to Practice report describes features of transition to practice programs, including the type and length of the program, whether the program used an employment model, the type and number of participants in the program, how the program was coordinated, and the benefits of the program. Frequency counts were used to describe and compare transition to practice program features.