# Description of Three New Data Elements for Survival – Presumed Alive

Note: This document describes three of seven survival variables which were designed to facilitate a common approach to survival analysis by NAACCR registries. For the November 2013 submission, these seven data elements will be in the state requestor part of the NAACCR record since the fields are approved, but not yet in the NAACCR record layout. It is anticipated that they will be in the record for the November 2015 submission.

## SURV-MOS PRESUMED ALIVE

Alternate Name	Item #	Length	Source of Standard	Column #
		4	NAACCR	2598-2601

### Description

Because not all central cancer registries conduct active patient follow-up, it is necessary to have an option for calculating survival times based on the assumption that the registry has ascertained all available deaths (state/province and national), and persons not known to be deceased are presumed to be alive as of the last date for which complete death ascertainment is available. The survival interval in months is calculated using the month, day, and year of the Surv-Date DX Recode [no NAACCR number yet] and the month, day, and year of the Surv-Date Presumed Alive [no NAACCR number yet]. The survival program is available from your standard setter or NAACCR.

Example of a case diagnosed in 2011 and submitted in 2013. Date of submission: 11/1/2013 Date of diagnosis: 9/15/2011 Date of last contact: 10/17/2011 Latest date for complete death ascertainment: 12/31/2011 Vital status: Alive Study cutoff date: 12/31/2011

Under the "presumed alive" scenario, 12/31/2011 would be used as the endpoint for the survival calculation. The presumed alive survival time would be 3 months, while the survival time using the date of last contact (assuming active follow-up) would be 1 month.

## Rationale

Accurate survival estimates are crucial for monitoring trends in population-based cancer survival and assessing the effectiveness of healthcare delivery to cancer patients. With the aim of obtaining the most precise estimates of survival, it is necessary to use complete dates (month, day, and year components) in the calculation of the survival interval. The survival interval in months is calculated using complete dates, and the algorithm imputes missing components of dates when they are not available in central registry records.

Additional information about the algorithm and what specific values are assigned in given missing date situations are available here: <u>http://seer.cancer.gov/survivaltime/</u>.

## Codes

A value of 9999 is for missing and matches the Surv- Flag Presumed Alive value of 9 or blank. Leading zeros will be used when needed to left fill the field.

# Calculation

Survival months = FLOOR((endpoint – date of diagnosis) / days in a month)

The FLOOR function always rounds down, e.g., FLOOR(1.68) = 1. Days in a month is assigned to 365.24/12.

### SURV-FLAG PRESUMED ALIVE

Alternate Name	Item #	Length	Source of Standard	Column #
		1	NAACCR	2602-2602

### Description

This flag is generated by the program that creates Surv-mos Presumed Alive [no NAACCR number yet] and describes how complete the date information is that was used to calculate survival months. This item is one of seven survival variables designed to facilitate a common approach to survival analysis by NAACCR registries.

### Rationale

The flag will enable analysts to easily select a subset of cases.

## Codes:

- 0 Complete dates are available and there are 0 days of survival (i.e., presumed alive date last contact = date of diagnosis)
- 1 Complete dates are available and there are more than 0 days of survival (i.e. presumed alive date last contact > date diagnosis)
- 2 Incomplete dates are available and there could be zero days of follow-up (i.e., known components are equal, e.g. 99/99/2006 and 10/02/2006)
- 3 Incomplete dates are available and there cannot be zero days of follow-up (i.e., any difference in known date components, e.g. 02/99/2006 and 03/99/2006)
- 8 Not calculated because a Death Certificate Only or Autopsy Only case
- 9 Unknown Blank Not coded

#### SURV-DATE PRESUMED ALIVE

Alternate Name	Item #	Length	Source of Standard	Column #
		8	NAACCR	2619-2626

### Description

The Surv-Date Presumed Alive is the last date for which complete death ascertainment is available from the registry at the time a file is transmitted. Because not all central cancer registries conduct active patient followup, it is necessary to have an option for calculating survival times based on the assumption that the registry has ascertained all available deaths (state/province and national), and persons not known to be deceased are presumed to be alive as of the last date for which complete death ascertainment is available. This variable is set in the survival program used to derive the seven survival variables. The survival program is available from your standard setter or NAACCR.

Example 1 Vital Status: Alive Date of Last Contact: 11/20/2011 Study Cut-off Date: 12/31/2011 Latest date for complete death ascertainment: 12/31/2011 Surv-Date Presumed Alive: 12/31/2011

### Rationale

The Surv-Date Presumed Alive is needed to be able to recalculate survival months if a different study cut-off date is used and provides flexibility to recalculate survival without needing to rerun the survival program on the original data.

#### Codes

Valid 8 digit dates.

## Calculation

Additional information about the survival algorithm and what specific values are assigned in given missing date situations are available here: <u>http://seer.cancer.gov/survivaltime/</u>.