Client-Level System Use & Length of Time Homeless Report
HMIS Programming Specifications

Introduction

The *Client-Level System Use & Length of Time Homeless Report* is designed to provide a general summary of information in an **individual client's HMIS history** that is relevant to chronic homelessness. It is intended to serve two general purposes:

- To consistently and systematically generate **third-party documentation** for an individual client's time spent in street outreach, emergency shelter, and/or Safe Haven projects that is confirmed by HMIS data for use by HUD-funded projects where chronic homelessness is an eligibility requirement; and
- To provide an overview of an individual client's HMIS history that may aid in discussion with clients and improve the accuracy of responses to the **Living Situation data element** at project entry.

HMIS records of enrollments, shelter nights, and street contacts can be used to document living situations relevant to a chronic homeless status, but this may involve hundreds of individual records, many of which may be inaccessible due to data-sharing restrictions. This report summarizes data relevant to chronic homelessness in broad categories using logic that is consistent with HUD's requirements. Aside from simplifying the output and resolving potential data conflicts, this is intended to facilitate adoption of the report in HMIS implementations where data-sharing policies and procedures might prohibit the inclusion of more detailed information.

Although it is not mandatory, HUD encourages HMIS implementations to review and consider revisions to policies and procedures that would prohibit use of this report because sharing HMIS history at this general level is not allowed.

The following factors should be considered in assessing the results of this report:

- In a continuum with low HMIS participation rates, it will not provide a complete representation of time spent in continuum projects. It should always be considered a **starting point for documentation**; in other words, to the extent a month is documented in HMIS, it represents a month the provider does not need to seek out other documentation. If a month is not documented in HMIS, other documentation must still be gathered to complete the documentation process as appropriate for the client's situation.
- The validity of the report depends on the **accuracy and timeliness of HMIS data**. Project start dates, housing move-in dates, and exit dates – elements that are frequently reported as problematic with respect to timeliness – are particularly critical.
- A gap in documentation **does not necessarily** constitute a break in homelessness. It may reflect time living on the streets while not contacted by a street outreach provider, time in a project that does not participate in HMIS, or time homeless in another continuum.

Use of this report as documentation for eligibility purposes is contingent on the approval of the continuum. At its discretion, a continuum may require additional documentation if HMIS data quality and/or participation rates are likely to compromise accuracy.

Report Parameters

Personal ID – This may be entered/selected by a user or, when the report is integrated into a client record, supplied by the HMIS application. Identifies the client for whom the report is being generated.

Report Date – This may be entered/selected by a user; it may default to the current date but a user must be able to generate the report for any date. Information after Report Date is excluded from the report.

Report Start – This must be calculated by the HMIS based on the *Report Date.* It is the first date in the 3-year period ending on the *Report Date*. As an example, if the *Report Date* is 10/31/2017, the *Report Start* will be 11/1/2014.

Relevant HMIS Data Standards Elements

DE#	Data Element Name	Notes / Conditions
2.2	**Project Identifiers**	Identify all relevant projects based on **Project Type** in which the client (*Personal ID*) was active in the 3 years prior to the *Report Date*.
2.4	**Project Type**	Data may be included in the report from any projects of types: 1 - Emergency Shelter 4 - Street Outreach 8 - Safe Haven 2 - Transitional Housing 3 - Permanent Supportive Housing 9 - PH Housing Only 10 - PH Housing with Services 13 - Rapid Re-Housing
2.5	**Method for Tracking Emergency Shelter Utilization**	If **Project Type** = 1, method must be either: 0 – Entry/Exit; or 3 – Night-by-Night.
3.1	**Name**	When used to document time on the street or in shelter for eligibility purposes, the report must include the **First Name**, **Middle Name** (if present), **Last Name**, and **Name Suffix** (if present) associated with the **PersonalID** for which the report is being generated.
3.10	**Project Start Date**	Enrollments must have a **Project Start Date** on or before the *Report Date.*
3.11	**Project Exit Date**	Enrollments must have a **Project Exit Date** that is NULL or a **Project Exit Date** on or after *Report Start*.
3.20	**Housing Move-In Date**	If **Project Type** = 3,9,10, or 13: Enrollments used for documentation must have a **Housing Move-In Date** on or before the *Report Date*.
4.12	**Contact**	If **Project Type** = 4: Enrollments must have **Contact** records where: • **Date of Contact** is between *Report Start* and *Report Date*; and • **Staying in Streets, ES, or SH** = 1 (Yes). • **Date of Contact** does not conflict with an HMIS record of the client in transitional or permanent housing.
4.14	**Bed-Night Date**	If **Project Type** = 1 and **Method for Tracking Emergency Shelter Utilization** = 3: Enrollments must have one or more records where **Bed-Night Date** is between *Report Start* and *Report Date*.
3.917	**Living Situation**	Data collected at any project entry between *Report Start* and *Report Date*.

Business Logic

Overview

The report summarizes a client's history in two different ways:

- **Documented Living Situation** output is based solely on HMIS data that provides evidence of a client's status and may be used as documentation without additional verification. It does not include any information collected directly from the client. Any documented status takes precedence over a reported status.
- **Reported Living Situation** output fills in information not documented by HMIS data with any self-reported **3.917 Living Situation** data collected during the three-year period. The reported output does not constitute documentation, but may help in collecting accurate information for a new enrollment and in identifying potential sources of additional documentation.

Definitions

These summaries are based on a timeline for the three years prior to the *Report Date*. Bed nights and dates with street contacts are counted and each date is assigned one of seven status categories:

- **Permanent housing–** This status is applied to any date on which the client was a resident of a continuum permanent housing project as documented between **Housing Move-In** and **Project Exit Date** data elements.
- **Transitional housing–** This status is applied to any date on which the client was a resident of a continuum transitional housing project as documented between **Project Start** and **Project Exit Date** data elements.
- **Documented street/shelter –** This status is applied to any date on which the client was living on the streets, in emergency shelter, or in a Safe Haven as documented based on one or more records of:
  - **Project Start** and **Project Exit Date** (Safe Haven and entry-exit ES);
  - A **Bed-Night Date** (night-by-night ES);
  - A **Contact** where the client is staying on streets/ES/SH (street outreach).
- **Documented break entering TH/PH–** This status is applied *once* for any period of 7 or more consecutive dates where all of the following are true:
  - Occurs between two street/shelter dates 7 or more days apart; and
  - Does not include a street/shelter date; and
  - Does include 7 or more consecutive days in permanent or transitional housing.
- **Self-reported street/shelter–** As recorded in the **Living Situation** data element for one or more project entries in the three-year period, client reported staying on the street or in ES/SH. This status is included in report output only if there is not already a *Documented street/shelter* status.
- **Self-reported/potential break** – Client's response to the **Living Situation** data element at one or more project entries in the three-year period indicates a *non*-street/shelter living situation which lasted long enough to meet the definition of a break in street/shelter time.
- **Unknown** – There is no information in HMIS for the date in any of the defined categories.

Order of Operations

Follow the logic below for each relevant date in the three-year period. The logic will enforce a prioritization of information.

Step One: Identify Documented Status

In this step, each date must meet these criteria in addition to any specified below:

1. On or after **Report Start**
2. AND on or after **Project Start Date**
3. AND on or before **Report Date**
4. AND before **Project Exit Date** (if **Project Exit Date** is not null).

Each date in the three-year period is assigned the first status from the list below that applies:

1. *Permanent housing* if the date is covered by a permanent housing enrollment where it is on or after **Housing Move-In Date.**
2. *Transitional housing* if the date is covered by a transitional housing enrollment.
3. *Documented street/shelter* if the date is covered by an entry-exit emergency shelter stay.
4. *Documented street/shelter* on any **Bed Night Date** in a night-by-night emergency shelter.
5. *Documented street/shelter* on any **Date of Contact** when:
   a. **Staying in Streets, ES, or SH** = Yes
   b. OR **Location of Contact** = Place not meant for habitation (in order to utilize any relevant data entered under pre-2017 Data Standards).

Step 1: For any given date in the three-year period, in priority order...				
...when client has an enrollment in...	...and the date is...			...assign status for the date of...
PSH Project	On or after Housing move-in Date	AND	Before Project Exit Date	Permanent Housing
RRH Project	On or after Housing move-in Date	AND	Before Project Exit Date	Permanent Housing
Other PH Project	On or after Housing move-in Date	AND	Before Project Exit Date	Permanent Housing
TH Project	On or after Project Start Date	AND	Before Project Exit Date	Transitional Housing
SH or ES Entry-Exit	On or after Project Start Date	AND	Before Project Exit Date	Documented Street/Shelter
ES Night by Night	Bed Night Date			Documented Street/shelter
Street Outreach	ES/SH/Street Contact Date			Documented Street/shelter

Step Two: Identify Homeless Status Documented by Definition

Under the HUD definition of chronic homelessness, any period of less than 7 days between two instances of living on the street, in emergency shelter, or in a Safe Haven is not considered a break. These periods are considered documented even though no bed night and/or contact is recorded in a shelter or outreach project. Because this step first requires identifying known SO/ES/SH dates, it must be done after step one even though it may alter dates already decided in step one.

Regardless of any previously assigned status: Assign a status of *Documented street/shelter* for any date in a series of six or fewer nights bracketed by *Documented street/shelter* dates.

Note that this status will take precedence over any unlikely (but theoretically possible) stay of 6 or fewer nights in transitional or permanent housing.
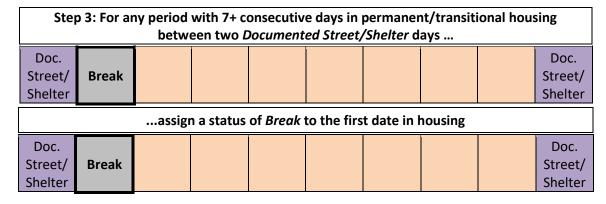
Step 2: For *any* series of dates in the date range between two *Documented Street/Shelter* dates <7 days apart…							
Doc. Street/ Shelter							Doc. Street/ Shelter
...assign any blank or non-street/shelter dates the status of *Documented Street/Shelter*							
	Doc. Street/ Shelter	Doc. Street/ Shelter	Doc. Street/ Shelter	Doc. Street/ Shelter	Doc. Street/ Shelter	Doc. Street/ Shelter	

Step Three: Identify "Breaks" in Status by Definition

By definition, any period of a week or more in a non-street/shelter living situation is a break in street/shelter time when it occurs between two street/shelter dates. The break separates two different 'times' that the client was street/shelter homeless.

Regardless of any previously assigned status: Assign as status of *Documented break entering TH/PH* for the first date in TH/PH where all of the following are true:

1. Occurs between two *Documented street/shelter* dates 7 or more days apart
2. AND does not include a *Documented street/shelter* date
3. AND includes 7 or more consecutive days in permanent or transitional housing.

Step 3: For any period with 7+ consecutive days in permanent/transitional housing between two *Documented Street/Shelter* days …								
Doc. Street/ Shelter	**Break**							Doc. Street/ Shelter
...assign a status of *Break* to the first date in housing								
Doc. Street/ Shelter	**Break**							Doc. Street/ Shelter

Only the first date between the two *Documented street/shelter* dates is marked as a break because the exact length of a break is not relevant to chronic homeless status, other than it must be 7 days or longer. Even if there are two separate stays of a week or more in permanent/transitional housing, they are considered part of the same break if there is no *Documented street/shelter* date between them.

Step Four: Identify Self-reported Street/Shelter Status

For any date not already assigned a status in steps one through three:

Additional time homeless as reported by the client in **Living Situation** is only included from project stays where the client was homeless at project start, as determined below:

1. **Project Type** is street outreach, emergency shelter, or safe haven
2. OR **Project Type** is transitional housing, permanent supportive housing, permanent housing only, permanent housing with services, or rapid re-housing with one of the following:
   a. a homeless **Living Situation**
   b. OR an institutional **Living Situation** of less than 90 days immediately preceded by a homeless situation
   c. OR a transitional or permanent housing **Living Situation** of less than 7 nights immediately preceded by a homeless situation.

For project stays meeting the above criteria, assign a status of *Self-reported street/shelter* when the date is:

1. On or after **Report Start**
2. AND on or after **Approximate Date Started**
3. AND on or before **Report Date**
4. AND before **Project Exit Date** (if **Project Exit Date** is not null)
5. AND if the project stay is PH/RRH, before **Housing Move-In Date** (if **Housing Move-In Date** is not null)
6. AND if the project stay is other than PH/RRH, before **Project Entry Date.**

Step 4: For any date without a status:			
...when client has an enrollment in...	**...and the date is...**		**...assign status for the date of...**
PSH Project RRH Project Other PH Project	On or after Approximate Date Started*	AND Before Housing Move-in Date	Self-Reported Street/Shelter
Any other continuum project type		AND Before Project Start Date	

*Approximate Date Started is only used for project stays where the client is literally homeless at start.

Step Five: Identify Self-reported/Potential Breaks

For any date not already assigned a status, or which has a status of *Self-reported street/shelter*, assign a status of *Self-reported/potential break* for the date immediately prior to **Project Start Date** for any continuum enrollment where all of the following are true:

1. **Project Start Date** minus 1 day is between any two dates with a status of *Documented street/shelter* or *Self-reported street/shelter*.
2. AND **Living Situation** is one of the following:
    a. Institutional stay of more than 90 days
    b. OR Transitional or permanent housing situation of 7 nights or more

Step 5: For any date without a status when living situation was not Unknown and the length of stay in previous place was 7+ nights…				
…when client has an enrollment in…	**…and the date is…**		**…assign status for the date of…**	
Any other continuum project type	Street/ Shelter	Day before Project Start Date between any two Street/Shelter dates	Street/ Shelter	**Self-Reported/ Potential Break**

Step Six: All remaining dates

For any date not already assigned a status in steps one through five:

Assign a status of *Unknown*. Though not directly reported in the report summary, identifying these dates will contribute to the output in detail view.

Report Output

Header

When used to document time on the street or in shelter for eligibility purposes, the report must include:

1. The **First Name**, **Middle Name** (if present), **Last Name**, and **Name Suffix** (if present) associated with the **PersonalID** for which the report is being generated.
2. The **Personal ID** for the client record.
3. The *Report Date.*

Report Summary View

	A	B	C	D	E
1	Year & Month	Documented Street/Shelter	Self-Reported Street/Shelter	Documented Break	Self-Reported/ Potential Break
2	(See instructions below)				

1. **Column A – Year & Month –** In descending chronological order, list in separate rows each year and month (e.g., "2017 October") in the three-year period, ending with the earliest month in which there is a *Street/shelter* or *Reported street/shelter* date.
2. For each year/month in column A, indicate with an "X" in columns B through E the type of activity occurring in that month. Only one X in each relevant column is necessary even if the event happened more than once in the given month.
    a. **Column B – Documented Street/shelter**
    b. **Column C – Self-reported Street/shelter**
    c. **Column D – Documented Break**
    d. **Column E – Self-Reported/Potential Break**

Report Detail View

	A	B	C
1	First Night of Status	Last Night of Status	Situation Detail
2	(See instructions below)		

1. Output a row for each range of dates identified, in descending order according to the first night of the range.
2. In each row, output the start and end of the range in columns A and B, respectively.
3. Output the type of situation describing the range. This could be any of the categories listed in Definitions.
4. Note that for PH/TH stays, the first date of the client being in housing may be identified as *Documented break entering TH/PH*.

Sample Code

The code below was written for Microsoft SQL Server 2008 R2 using HMIS data in tables structured to match the HMIS CSV 6.11 format. It is not necessarily optimized for speed but is intended to reflect the business rules as described above.

```sql
set nocount on

declare @rptDate date, @rptStart date
set @rptDate = GETDATE()        -- Today's date, for example.
set @rptStart = dateadd(yy, -3, @rptDate)


declare @client int
set @client = 1234


create table #threeYears (
        id int identity (1,1),
        theDate date,
        dateStatus varchar(255)
)

create index ix_tempdates on #threeyears (thedate);
create index ix_tempdates_2 on #threeyears (id) include (datestatus);


declare @date date
set @date = @rptDate


-- Build the entire list of dates:
while @date >= @rptStart
        begin
                insert into #threeYears (theDate, dateStatus)
                values (@date, '')

                select @date = dateadd(d, -1, @date)
        end


-- STEP ONE: Identify Documented Statuses
-- 1a: Set dates to permanent housing where client was definitely moved into housing:
update ty
set dateStatus = 'Permanent housing'
from #threeYears ty
        inner join vw_HMIS_CSV_611_Enrollment n on n.MoveInDate <= ty.theDate
        left outer join vw_HMIS_CSV_611_Exit x on x.EnrollmentID = n.EnrollmentID and x.PersonalID = @client
where n.PersonalID = @client
        and n.ProjectID in ( select ProjectID from vw_HMIS_CSV_611_Project p where p.ContinuumProject = 1 and p.ProjectType in (3,9,10,13) )
        and (x.ExitDate is null or ty.theDate < x.ExitDate)
```

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```sql
        and ty.theDate <= @rptDate
        and coalesce(x.ExitDate, dateadd(d, 1, @rptDate)) > ty.theDate




-- 1b: Set dates to transitional housing where client was present:
update ty
set dateStatus = 'Transitional housing'
from #threeYears ty
        inner join vw_HMIS_CSV_611_Enrollment n on n.EntryDate <= ty.theDate
        left outer join vw_HMIS_CSV_611_Exit x on x.EnrollmentID = n.EnrollmentID and x.PersonalID = @client
where n.PersonalID = @client
        and n.ProjectID in ( select ProjectID from vw_HMIS_CSV_611_Project p where p.ContinuumProject = 1 and p.ProjectType in (2) )
        and coalesce(x.ExitDate, dateadd(d, 1, @rptDate)) > ty.theDate
        and ty.dateStatus = ''




-- 1c: Set dates for entry/exit shelters and safe havens:
update ty
set dateStatus = 'Documented street/shelter'
from #threeYears ty
        inner join vw_HMIS_CSV_611_Enrollment n on n.EntryDate <= ty.theDate
        left outer join vw_HMIS_CSV_611_Exit x on x.EnrollmentID = n.EnrollmentID and x.PersonalID = @client
where n.PersonalID = @client
        and n.ProjectID in ( select ProjectID from vw_HMIS_CSV_611_Project p where p.ContinuumProject = 1 and p.ProjectType = 8 or (p.ProjectType = 1
and p.TrackingMethod = 0) )
        and coalesce(x.ExitDate, dateadd(d, 1, @rptDate)) > ty.theDate
        and ty.dateStatus = ''




-- 1d: Set dates to night-by-night shelter
update ty
set dateStatus = 'Documented street/shelter'
from #threeYears ty
        inner join vw_HMIS_CSV_611_Enrollment n on n.EntryDate <= ty.theDate
        inner join vw_HMIS_CSV_611_Services s on s.EnrollmentID = n.EnrollmentID and s.PersonalID = @client
        left outer join vw_HMIS_CSV_611_Exit x on x.EnrollmentID = n.EnrollmentID and x.PersonalID = @client
where n.PersonalID = @client
        and n.ProjectID in ( select ProjectID from vw_HMIS_CSV_611_Project p where p.ContinuumProject = 1 and p.ProjectType = 1 and p.TrackingMethod =
3 )
        and s.RecordType = 200 and s.DateProvided = ty.theDate
        and ty.dateStatus = ''




-- 1e: Set dates for contacts:
update ty
set dateStatus = 'Documented street/shelter'
from #threeYears ty
        inner join vw_HMIS_CSV_611_Enrollment n on n.EntryDate <= ty.theDate
        inner join vw_HMIS_CSV_611_Services s on s.EnrollmentID = n.EnrollmentID and s.PersonalID = @client
        left outer join vw_HMIS_CSV_611_Exit x on x.EnrollmentID = n.EnrollmentID and x.PersonalID = @client
where n.PersonalID = @client
        and n.ProjectID in ( select ProjectID from vw_HMIS_CSV_611_Project p where p.ContinuumProject = 1 and p.ProjectType = 4 )
```

```sql
        -- Including record type 12 here will pull in any relevant data entered under pre-2017 Data Standards.
        and s.RecordType in (12, 13) and s.DateProvided = ty.theDate
        and s.TypeProvided = 1
        and ty.dateStatus = ''



-- STEP TWO: Identify Homeless Status Documented by Definition
update ty
set dateStatus = 'Documented street/shelter'
from #threeYears ty
        inner join #threeYears doc1 on doc1.theDate < ty.theDate
        inner join #threeYears doc2 on doc2.theDate > ty.theDate
where doc1.dateStatus like 'Documented street/shelter'
        and doc2.dateStatus like 'Documented street/shelter'
        and ty.dateStatus not like 'Documented street/shelter'
        and doc1.theDate > DATEADD(d, -7, doc2.theDate)



-- STEP THREE: Identify "Breaks" in Status by Definition
-- Tag the first date of a client entering TH or PH housing
update enterhousing
set enterhousing.dateStatus = 'Documented break entering TH/PH'
from #threeYears enterhousing
        inner join #threeYears daybefore
                on daybefore.id = enterhousing.id + 1
                -- This will ensure this is the first day in the sequence:
                and (daybefore.dateStatus not like '%housing%')
        -- The next two joins will ensure the date is surrounded by other street/shelter dates:
        inner join #threeYears pre on pre.id > enterhousing.id and pre.dateStatus like 'Documented street/shelter'
        inner join #threeYears post on post.id < enterhousing.id and post.dateStatus like 'Documented street/shelter'
where enterhousing.dateStatus like '%housing'
        -- This will ensure there is definitely no housing between this date and the street/shelter date:
        and (
                select count(id) from #threeYears
                where id > enterhousing.id
                        and id <= pre.id
                        and dateStatus like '%housing'
        ) = 0
        -- This will ensure there are at least 7 days, beginning with this start date, that the client was in housing.
        and (
                select count(id) from #threeYears
                where id between enterhousing.id -6 and enterhousing.id
                        and (dateStatus like '%housing')
        ) = 7



-- STEP FOUR: Identify Self-reported Street/Shelter Status
-- 4a: Self-reported for PH enrollments:
update ty
set ty.dateStatus = 'Self-reported street/shelter'
from #threeYears ty
        inner join vw_HMIS_CSV_611_Enrollment n on n.DateToStreetESSH <= ty.theDate
```

```sql
        left outer join vw_HMIS_CSV_611_Exit x on x.EnrollmentID = n.EnrollmentID and x.PersonalID = @client
where n.PersonalID = @client
        and n.ProjectID in ( select ProjectID from vw_HMIS_CSV_611_Project p where p.ContinuumProject = 1 and p.ProjectType in (3,9,10,13) )
        and (
                n.LivingSituation in (1,16,18)
                or (
                        n.LOSUnderThreshold = 1
                        and PreviousStreetESSH = 1
                )
        )
        and coalesce(n.MoveInDate, x.ExitDate, dateadd(d, 1, @rptDate)) > ty.theDate
        and ty.dateStatus = ''




-- 4b: Self-reported for any other type of enrollment:
update ty
set ty.dateStatus = 'Self-reported street/shelter'
from #threeYears ty
        inner join vw_HMIS_CSV_611_Enrollment n on n.DateToStreetESSH <= ty.theDate
        inner join vw_HMIS_CSV_611_Project p on n.ProjectID = p.ProjectID
        left outer join vw_HMIS_CSV_611_Exit x on x.EnrollmentID = n.EnrollmentID and x.PersonalID = @client
where n.PersonalID = @client
        and p.ContinuumProject = 1
        and p.ProjectType in (1, 2, 4, 8, 11, 12, 14)
        and (
                p.ProjectType in (1, 4, 8)
                or n.LivingSituation in (1, 16, 18)
                or (
                        n.LOSUnderThreshold = 1
                        and PreviousStreetESSH = 1
                )
        )
        and n.EntryDate > ty.theDate
        and ty.dateStatus = ''




-- STEP FIVE: Identify Self-reported/Potential Breaks
update ty
set dateStatus = 'Self-reported/potential break'
from #threeYears ty
        inner join #threeYears pre on pre.id > ty.id and pre.dateStatus like '%street/shelter'
        inner join #threeYears post on post.id < ty.id and post.dateStatus like '%street/shelter'
        inner join vw_HMIS_CSV_611_Enrollment n on ty.theDate = dateadd(dd, -1, n.EntryDate)          -- One day before entry.
where n.PersonalID = @client
        and n.ProjectID in ( select ProjectID from vw_HMIS_CSV_611_Project p where p.ContinuumProject = 1)
        and (
                (
                        n.LivingSituation in (15, 6, 7, 24, 5)
                        and n.LengthOfStay in (4, 5)
                )
                or
                (
                        n.LivingSituation in (14, 23, 21, 3, 22, 19, 25, 20, 26, 12, 13, 2)
                        and n.LengthOfStay in (2, 3, 4, 5)
```

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```sql
                )
        )
        and (
                ty.dateStatus = ''
                or ty.datestatus = 'Self-reported street/shelter'
        )
        -- There are no dates where the client was in housing between this date and the PREVIOUS street/shelter event.
        and (
                select count(id)
                from #threeYears
                where id between ty.id and pre.id
                        and dateStatus like '%housing'
        ) = 0
        -- There are no dates where the client was in housing between this date and the NEXT street/shelter event.
        and (
                select count(id)
                from #threeYears
                where id between post.id and ty.id
                        and dateStatus like '%housing'
        ) = 0


-- STEP SIX: ALMOST DONE!  EVERY REMAINING DATE IS 'UNKNOWN'.
update ty
set dateStatus = 'Unknown'
from #threeYears ty
where dateStatus = ''


-- FINAL RESULTS: SUMMARY VIEW
select distinct YEAR(theDate) as year, MONTH(thedate) as month,
        (select top 1 'X' from #threeYears
        where YEAR(theDate) = YEAR(ty.thedate)
                and MONTH(thedate) = MONTH(ty.thedate)
                and dateStatus = 'Documented street/shelter'
        ) as documentedStreetShelter,
        (select top 1 'X' from #threeYears
        where YEAR(theDate) = YEAR(ty.thedate)
                and MONTH(thedate) = MONTH(ty.thedate)
                and dateStatus = 'Self-reported street/shelter'
        ) as srStreetShelter,
        (select top 1 'X' from #threeYears
        where YEAR(theDate) = YEAR(ty.thedate)
                and MONTH(thedate) = MONTH(ty.thedate)
                and (
                        dateStatus = 'Documented break entering TH/PH'
                )
        ) as thPh,
        (select top 1 'X' from #threeYears
        where YEAR(theDate) = YEAR(ty.thedate)
                and MONTH(thedate) = MONTH(ty.thedate)
                and dateStatus = 'Self-reported/potential break'
        ) as srBreak
from #threeYears ty
order by YEAR(theDate) desc, MONTH(thedate) desc
```

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```sql
-- FINAL RESULTS: DETAIL VIEW
-- The base query starts by detecting the end dates of each sequence of events, just because the dates are already in descending order.
select
        (
                select top 1 tyStarting.theDate
                from #threeYears tyStarting
                where tyStarting.id >= tyEnding.id
                        and tyStarting.dateStatus = tyEnding.dateStatus          -- Seeking only dates that have the same status as the end date
                        and (
                                        (select dateStatus
                                        from #threeYears ty2
                                        where ty2.id = tyStarting.id + 1            -- The day before this day...
                                ) <> tyStarting.dateStatus                          -- ...has a different status,
                                or                                                 -- or this is the very first day of events
                                (
                                        tyStarting.id = ( select MAX(ID) from #threeYears )
                                )
                        )
                order by id                                    -- Sorting by ID will give us the latest date that meets all the criteria
        ) as startingDate,
        tyEnding.theDate as endingDate,
        tyEnding.dateStatus
from #threeYears tyEnding
where
        (
                select dateStatus
                from #threeYears ty2
                where ty2.id = tyEnding.id – 1               -- The day after this day...
        ) <> tyEnding.dateStatus                             -- ...has a different status,
        or tyEnding.id = 1                                   -- or this is the very last day of events.
order by tyEnding.id


drop table #threeYears
```