




MIROW MINI-GUIDE

RECOMMENDATIONS OF THE AMERICAN
IMMUNIZATION REGISTRY ASSOCIATION (AIRA)
MODELING OF IMMUNIZATION REGISTRY
OPERATIONS WORKGROUP (MIROW)

Management of Patient Status in Immunization Information Systems



A decorative vertical bar in a muted green color is positioned to the left of the main text. The background of the entire page features a dark grey vertical strip on the left side, which contains faint, stylized white icons of people and connecting lines, suggesting a network or community theme.

Patient status expresses the concept of responsibility for immunization of a patient at a provider organization or geographic jurisdiction level.

A provider organization has responsibility for ensuring the vaccination of its patient. Similarly, a public health organization has responsibility for ensuring the vaccination of a patient within its geographic jurisdiction.

Patient status should be maintained at provider-organization and geographic-jurisdiction levels to ensure there is always a party responsible for immunization of every individual. If a patient does not have active status with any provider organization within a geographic jurisdiction, then a public health authority is responsible for the individual's immunization. Patient status is used to determine which patients to include in assessments and to decide which patients receive reminder/recall notifications.

This mini guide serves as a summary introduction to the more detailed, full guide, available at <https://www.immregistries.org/mirow>.

THE IMPORTANCE OF PATIENT STATUS

From the public health perspective, it is important to maintain status for a patient at both provider organization and geographic jurisdiction levels to ensure there is always a party responsible for immunization of every patient. For example, if a patient has moved within a jurisdiction and does not have active status with any provider organization, then the public health authority where the patient resides would be responsible for the patient's vaccination.

Consistent and comparable designation of patient status is important to:

- Determine which patients to include in coverage assessments
- Decide which patients receive reminder/recall notifications
- Promote data quality
- Promote data comparability



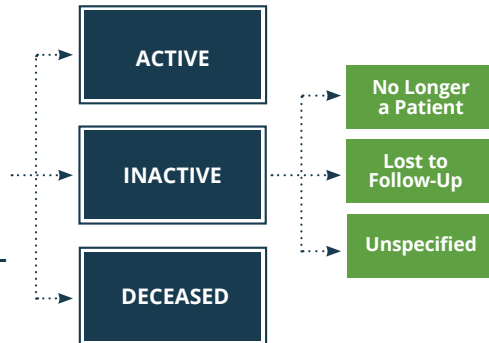
An IIS must consider a variety of factors when determining patient status for individuals at both the provider organization and geographic jurisdiction levels. The recommendations developed forge the path for an IIS to navigate these factors.

PUBLIC HEALTH AND PATIENT STATUS: HIERARCHICAL APPROACH

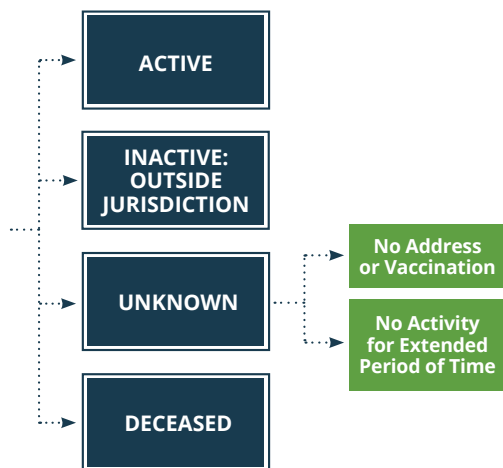
There are two levels of patient status—at the provider level and at the geographic jurisdiction level. Maintaining a patient status at the geographic jurisdiction level ensures that there will always be a party responsible for a patient's vaccinations, even if the patient is not active with any provider organization. To maintain the responsibility of at least one party for the vaccination of a patient, a more rigid approach is used in assigning non-active status at the geographic jurisdiction level than at the provider organization level.



**PATIENT STATUS
AT PROVIDER
ORGANIZATION LEVEL**



**PATIENT STATUS
AT GEOGRAPHIC
JURISDICTION LEVEL**





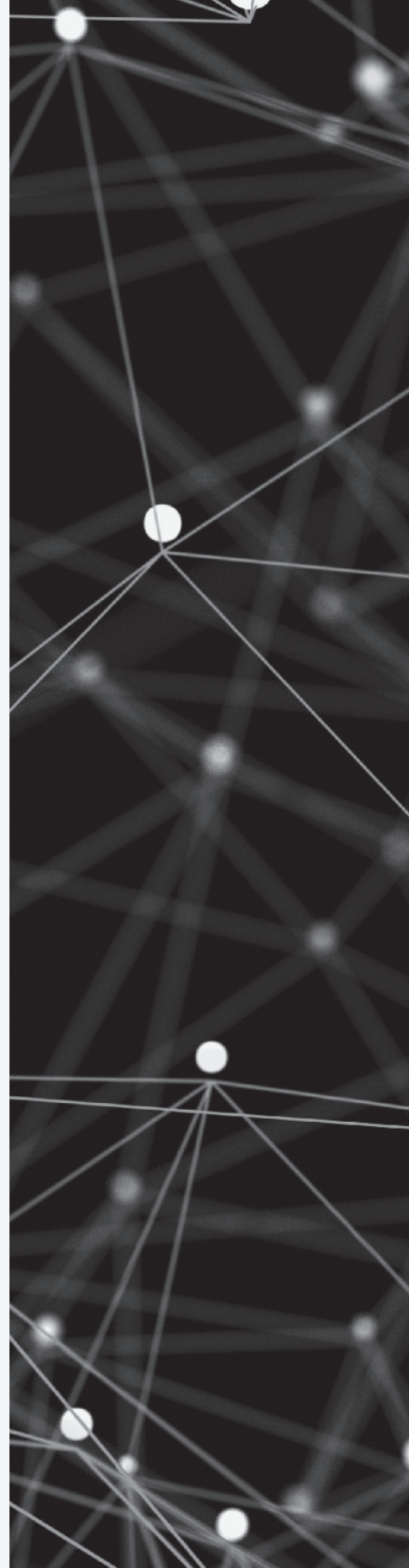
1-1 vs. 1-M IIS

IIS may use one of two common approaches to designate the responsibility of a provider organization for vaccinating a patient. Some IIS allow only one provider organization to have responsibility for a patient at a time (1-1 approach). Other IIS allow more than one provider organization to have responsibility for a patient simultaneously (1 to many, or 1-M approach). The business rules developed account for this difference in approach, providing separate, yet comparable, guidance for each.

PRINCIPLES

A principle is a high-level direction that helps to capture institutional knowledge and to guide the development of more specific business rules. There are 11 principles that relate to patient status. Below are a few highlighted ones.

- **Principle P301** tells us that each patient status should characterize the association between one patient and one party responsible for the patient's vaccinations.
- **Principle P303** tells us to avoid patients falling through the cracks by applying a more rigid approach in assigning non-active status at the geographic jurisdiction level than at the provider organization level.
- **Principle P312** states that patient status should be included in any submission from a provider organization to the IIS.



FULL GUIDE FEATURES

- **Principles:**
Fundamentals that support the business rules
- **Business Rules:**
Consensus-based recommendations, including notes and background
- **Operational Scenarios:**
Resolutions for typical and challenging situations that illustrate implementation of best practice recommendations. Examples in this chapter apply the guidelines to twenty-two real situations.
- **HL7 Considerations:**
How to designate patient status in electronically transmitted HL7 data

IMPACT OF PATIENT STATUS ON REMINDER-RECALL NOTIFICATION AND ASSESSMENT REPORTS

Patient status is an important factor when determining which individuals to include in assessment reports or deciding which patients should receive reminder/recall notifications.

Rules for including patients in reminder/recalls and assessment reports are documented in the following decision tables: The top half of each table reflects the conditions used to determine whether a patient is included in the process. The bottom half reflects the recommended actions. Each column represents a scenario indicating what the resulting action should be for specific conditions. For example, in Scenario A, if a patient has active status, he/she should be included in reminder/recall. In Scenario B, if a patient has inactive or deceased status, he/she should be excluded from reminder/recall notification.

REMINDER/RECALL NOTIFICATION

In general, no reminder/recall notifications should be sent to a patient who opts out of reminder/recall notifications, subject to local policies and laws. Some IIS do allow reminder/recall notifications to be sent to individuals who opted out of reminder/recall notifications (e.g., in case of a disease outbreak). Some IIS do not allow individuals to opt out of reminder/recall notifications.



Reminder/Recall (RR) at the provider organization level

CONDITIONS	SCENARIO A	SCENARIO B
Patient status at the provider organization level	Active	Inactive Deceased
Actions		
1. Include in provider organization RR	X	
2. Exclude from provider organization RR		X



Reminder/Recall (RR) at the geographic jurisdiction level

CONDITIONS	SCENARIO A	SCENARIO B	SCENARIO C
Patient status at the geographic jurisdiction level	Active	Inactive Deceased	Unknown
Actions			
1. Include in geographic jurisdiction RR	X		
2. Exclude from geographic jurisdiction RR		X	
3. IIS makes determination whether to include			X



ASSESSMENT REPORTS

There is a great variety of provider organization level assessments conducted based on IIS data. The guidelines present best practice recommendations for selecting a population cohort for a generic assessment report at the provider organization level based on AFIX considerations.

For assessment reports at the provider organization level, in general, patients with active status will be included and patients with deceased and inactive status will be excluded. For assessment reports at the geographic jurisdiction level, in general, patients with active and unknown status will be included, and patients with inactive and deceased status will be excluded.



Assessment report at the provider organization level

CONDITIONS	SCENARIO A	SCENARIO B
Patient status at the provider organization level	Active	Inactive Deceased
Actions		
1. Include in provider organization assessment report	X	
2. Exclude from provider organization assessment report		X



Assessment report at the geographic jurisdiction level

CONDITIONS	SCENARIO A	SCENARIO B
Patient status at the geographic jurisdiction level	Active Unknown	Inactive Deceased
Actions		
1. Include in geographic jurisdiction assessment report	X	
2. Exclude from geographic jurisdiction assessment report		X



LEARN MORE ABOUT PATIENT STATUS

This mini guide provides an overview of the in-depth, technical information related to these best practices found in the full Management of Patient Status in Immunization Information Systems Guidelines best practice guide. To download, visit the AIRA web site at: <https://www.immregistries.org/mirow>.



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