# Use Case XX: Reconciliation of Allergy/Intolerance List

## Description

The purpose of this use case is to describe the reconciliation of Allergy/Intolerance lists or details obtained from different source(s) by a health care provider. The provider compares the contents of the lists or details to identify discrepancies and errors. Any discrepancies or errors are verified with the sources and the patient/parent(s)/guardian(s).

The allergy/intolerance contents in the provider’s EHR repository will be updated based on the result of the verifications. A reconciled Allergy/Intolerance list may be sent to other relevant sources (e.g. the sources that provided the pre-reconciled allergy/intolerance lists, the Pharmacist and PHR or shared EHRS nominated by the patient.

## Conditions

1. The patient receives care within a health care system that can exchange data between providers and provider systems
2. The provider receives or obtains allergy/intolerance details/lists about the patient from different source(s), e.g. in discharge summary, referral or continuity of care documents

## Exceptions

None

## Preconditions

1. The EHRS repository of the provider contains allergy/intolerance details about the patient under his/her care
2. The provider receives or obtains allergy/intolerance details/list from different sources
3. The patient has documented allergies

## Use Case Steps

1. Adam Everyman is discharged from hospital after a week in the respiratory unit because of exacerbation of his chronic obstructive pulmonary disease (COPD). His pulmonologist Dr Penny Puffer sends his primary care physician (PCP) Dr. Patricia Primary a discharge summary that contains the hospital allergy/intolerance list.
2. Three days after discharge, Adam attends a follow-up appointment with his PCP, Dr Patricia Primary.
3. At the follow-up consultation, Dr Primary reviews the discharge summary from the hospital and discovers that there are discrepancies between the allergy/intolerance list in the discharge summary and the patient’s allergy/intolerance list detailed in the health care system EHRS repository
4. Dr Primary reviews the discrepancies with Adam and reconciles the inconsistencies. Dr Primary updates the patient’s allergy and intolerance list in the health care system EHRS repository with new allergy/intolerance details based on information from the patient and the hospital discharge summary.
5. With the consent of the patient, Dr Primary generates a reconciled allergy/intolerance list and sends the list to Dr Patricia Puffer, the patient’s community pharmacist Dr Susan Script and Adam Everyman’s Personal Health Record (PHR)

## Post Conditions

None

## Actors

Patient: Adam Everyman

Treating Pulmonologist (hospital): Dr Patricia Puffer

PCP: Dr Patricia Primary

Pharmacist: Ms Susan Script

## Use Case Scenario

Ada Everyman, a 48-year old patient, is under the care of his PCP, Dr Patricia Primary. He has a medical history of chronic obstructive pulmonary disease (COPD), gastro-oesophageal reflux disorder (GORD) and Type II diabetes Mellitus (diagnosed 6 months ago). His EHR held at the Dr Primary’s clinic shows that he has allergy to peanuts (reactions include: hives, tightening of the throat, wheezing); allergy/intolerance to amoxicillin + clavulanic acid (reactions include: nausea, vomiting, diarrhoea, rash); lactose intolerance (reactions: flatulence and diarrhoea).

Hospital Care: Adam was admitted to the hospital over the long weekend holiday due to acute exacerbation of his COPD and is managed in the respiratory unit of the hospital by Dr Patricia Puffer. It was confirmed that the exacerbation was triggered by Haemophilus influenza infection and was treated with a course of antibiotic – clarithromycin. During the in-hospital care, medications were prescribed by Dr Puffer for treatment of the patient’s other conditions including diabetes. On Day 3 of the hospitalization, the patient started to exhibit signs and symptoms including: headache, dizziness, skin rash, and hypoglycaemia. By process of elimination, it was determined that the adverse reactions were related to Glicazide. This oral hypoglycaemic agent was prescribed by the Dr Patricia Primary (PCP) four weeks prior to current episode of hospital admission. The medication was stopped and the patient recovered with no permanent adverse effect.

Discharge: After a week of in-hospital management, the patient’s condition improved significantly and was considered fit for discharge. A discharge summary was prepared and sent electronically to the patient’s PCP. A follow-up appointment was arranged by the hospital for the patient to be seen by his PCP 3 days after discharge.

PCP follow-up: At the follow-up consultation, Dr Primary discovered the following discrepancies in the discharge summary allergy/intolerance list after comparing to the patient’s allergy/intolerance list in the health care system EHRS repository:

* Allergy/intolerance to amoxicillin + clavulanic acid was not recorded at the hospital
* New entry of allergy/intolerance to Glicazide based on Adam’s discharge summary.

Dr Primary verified with Adam that he (the patient) did not mention amoxicillin + clavulanic allergy / intolerance history to Dr Puffer in the hospital; and that he did experience an adverse reaction to Glicazide.

Dr Well updated the health care system EHRS repository allergy/intolerance list with details on Glicazide (including signs and symptoms), ceased the prescription on Glicazide and reviewed diabetic treatment for the patient. Dr Primary generated a reconciled allergy/intolerance list and sent it electronically to the hospital, the patient’s pharmacist and the patient’s PHR