EMA/MODMED®

IDENTIFYING PATIENTS WITH CHRONIC SPONTANEOUS URTICARIA (CSU)

- **Workflow for identifying patients with CSU in EMA/ModMed® by diagnosis**

- **Urticaria Activity Score 7 (UAS7) Scoring Tool**

One of EMA/ModMed's reporting solutions may be used to help identify patients with CSU and assess clinical factors of those patients, such as immunoglobulin E (IgE), complete blood count (CBC), complete metabolic panel (CMP), thyroid peroxidase antibody (anti-TPO), and chronic urticaria index. Consult your organization if administrative user rights are required to access the reporting solutions.

The inclusion criteria are:
- ICD-10: L50.1
- Other codes: L50.8, L50.9

Step-by-step workflow for identifying patients with CSU in EMA/ModMed by diagnosis

Step 1: Access the Analytics Module
- Log into your EMA/ModMed platform
- Navigate to the **Analytics** module via the dashboard
- Select the option for creating a new report

Step 2: Define the Purpose of the Report
- Identify the goal, eg, identifying diagnosed patients with CSU
- Determine which data elements you may need: ICD-10 diagnosis codes; L50.1, L50.8, L50.9, medication lists, and lab results (eg, IgE, CBC, CMP, anti-TPO, CU [chronic urticaria] Index)

Step 3: Use Advanced Clinical Targeting
- Select the **Advanced Clinical Targeting** report tool
- Set inclusion criteria:
    - Choose one or more **Diagnosis Codes** (ICD-10)
- You can combine these criteria using AND/OR logic to narrow or expand your target population
- You may also define a baseline population such as "patients seen in the last 12 months"

Step 4: Refine With Additional Filters
- Add filters by provider, location, specialty (eg, Dermatology), or therapy utilization
- Limit by demographic criteria, such as age or gender
- Restrict by payer or plan if doing payer-specific outreach

Step 5: Review and Generate Results
- Click **Run Report** or **Generate Patient List**
- Review returned patients
- Validate sample charts to ensure filter accuracy

Step 6: Export or Take Action
- Export the list to .csv or Excel for use in campaigns
- Use integrated workflow tools (if available) to generate outreach tasks, secure messages, or follow-up appointments

This configuration guide provides step-by-step instructions for building and deploying the UAS7 Urticaria Scoring Tool and associated scoring system in EMA/ModMed.

The UAS7 Urticaria Scoring Tool can:

- Accepts 7 daily inputs (hives + itch severity, 0–3 each)
- Computes a daily UAS score (hives + itch) per day (0–6)
- Calculates the weekly sum (UAS7, from 0 to 42)
- Determines the category (well-controlled, mild, moderate, severe) based on the weekly total
- Saves this as discrete structured data (for reporting) and optionally displays it in the chart or links it to forms

Prerequisites & Permissions

- Administrative access/customization rights in your EMA/ModMed instance (configuration or "admin/developer" privileges)
- Access to form templates, custom logic rules, custom fields/data dictionary, report builder, or smart module configuration in EMA/ModMed
- A test/development (non-production) EMA/ModMed environment where you can build and validate without impacting live data
- Communication with EMA/ModMeds vendor support (or internal EMA/ModMed support team) for any logic or scripting constraints

Step 1: Define the Data Model (Fields)

You first need to define discrete fields that will store the inputs and output:

1. Seven daily hive severity fields
   - Naming suggestions: UAS7_Hives_Day1, UAS7_Hives_Day2, … UAS7_Hives_Day7
   - Data type: integer, allowed values 0–3
2. Seven daily itch severity fields
   - UAS7_Itch_Day1 through UAS7_Itch_Day7
   - Data type: integer 0–3
3. Daily UAS fields (optional, computed, or manual)
   - UAS7_Daily_Score1 through UAS7_Daily_Score7
   - Computed as Hives + Itch
4. Weekly total UAS7
   - UAS7_Weekly_Total
   - Integer, range 0–42
5. Category field
   - UAS7_Category
   - Single-select/enumerated (eg, "Well-controlled", "Mild", "Moderate", "Severe")

You may choose to skip the daily "computed" fields if daily is not needed; just capture the sum directly from inputs or compute entirely internally.

Step 2: Build the Logic/Computation Rules

Next, set up logic/rules so the system automatically calculates the weekly total and category:

1. Validation/Constraints
   - Enforce that hive and itch fields only accept 0–3 (reject invalid entries)
   - Optionally require all 7 days have a value before calculating the total
2. Computation of UAS7_Weekly_Total
   - Rule: UAS7_Weekly_Total = sum (UAS7_Daily_Score1 through 7)
     - If you didn't create separate daily UAS fields, you can define Daily_ScoreX = Hives_DayX + Itch_DayX in real time in the sum
   - If any day is blank, decide whether to treat it as zero or prevent calculation until all days are filled
3. Determination of Category
   - If UAS7_Weekly_Total ≤ 6 ⟶ Category = "Well-controlled"
   - If 7 ≤ total ≤ 15 ⟶ "Mild"
   - If 16 ≤ total ≤ 27 ⟶ "Moderate"
   - If 28 ≤ total ≤ 42 ⟶ "Severe"
4. Trigger/Event Rule
   - Set these rules to trigger when any of the daily input fields are saved or updated
   - Or designate a "Recompute UAS7" button or event
5. Default values or reset logic
   - Optionally, clear or reset all 7 daily inputs when starting a new week
   - Or flag when the week's inputs are complete

Step 3: UI/Form/Template Integration

You need to present the UAS7 inputs and result in a user interface (form) that clinicians or staff use, ideally in the patient's chart:

1. Add a Custom Section/Widget/Module
   - In EMA/ModMed's chart template or encounter form, insert a "UAS7" section
   - Label fields: "Day 1 – Hives (0–3)", "Day 1 – Itch (0–3)", etc
   - Add a computed field next to each day showing "Daily Score = Hives + Itch" (if built)
   - Place "Weekly Total" and "Category" fields at the bottom
2. Set Field Visibility & Access
   - Ensure these fields are visible (read/write) to appropriate user roles (nurses, providers)
   - Hide computed fields if users don't need to edit them — make them read-only
3. Smart Link/Auto-Fill (if supported)
   - If EMA/ModMed supports smart templates, insert a variable like {UAS7_Weekly_Total} to flow into notes or letter templates
   - Similarly, embed {UAS7_Category}
4. Default Value/Zero Fill Options
   - Optionally, set default of 0 or "Not answered" to each input at the start of the week
   - Or blank by default, prompting the user to fill them in

Step 4: Test Logic & Validation (Dev Environment)

In the test environment:

1. Create several test patients and input example data:
   - Eg, Day1: hives = 1, itch = 2; Day2: hives = 0, itch = 0; … etc.
2. Ensure the system sums correctly to the weekly total
3. Confirm category logic is correct (eg, total = 23 ➝ "Moderate")
4. Check edge cases:
   - All zeros ➝ total = 0 ➝ "Well-controlled"
   - All 3s ➝ total = 42 ➝ "Severe"
   - Missing a day ➝ rule behavior (block, default, partial)
5. Check that UI displays correctly and read-only fields cannot be manipulated
6. Confirm that saving one day's input triggers recomputation, or requires manual recompute as intended
7. Ensure no performance delays when fields recalculate

Step 5: Deploy & Migrate to Production

Once validated, deploy to the live (production) instance:

1. Back up current configuration
2. Migrate data definitions (fields), rules, and template changes
3. Run parallel testing with a small subset of users or chart
4. Monitor for errors or miscalculations
5. Train users on the new UI, field expectations, and how UAS7 is shown

Step 6: Ongoing Maintenance & Monitoring

- Periodically audit the stored UAS7 values for coherence
- Add alerts if any value is out of range or missing
- Adjust logic if you later want patient-entered data (eg, allow MyChart daily entries)
- Use reports to capture UAS7 trends over time

LIMITATIONS AND NOTES

Novartis is not responsible for the implementation, testing, and ongoing operation of any electronic health records tools. If you have any questions pertaining to the use of these guides, please refer to your internal IT/IS department. These tools are not designed for, and have not been demonstrated to meet, any accreditation requirements. The instructions included in this brochure are applicable to the Epic platform and are not guaranteed to work for any other software platforms.

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