

Utilization of Data & Analytics to Influence Medication Adherence

Advocate Cerner Collaborative

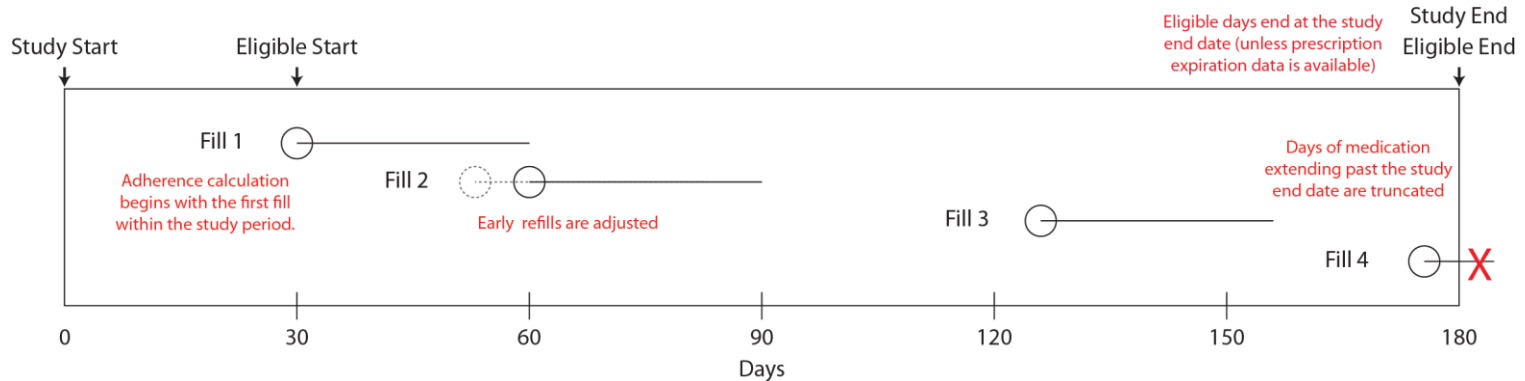


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eMAC Roundtable

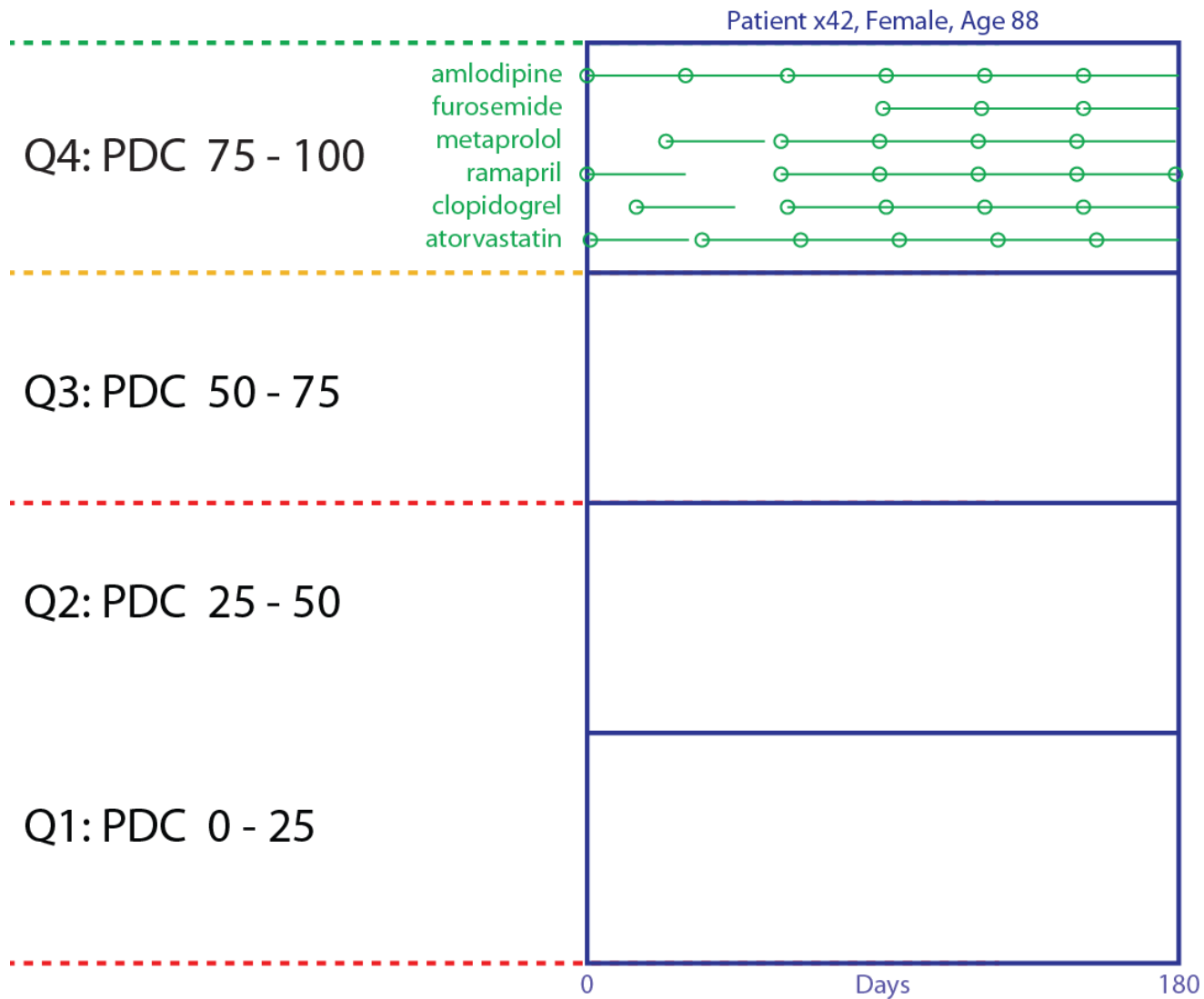


Claims-based Adherence Basics

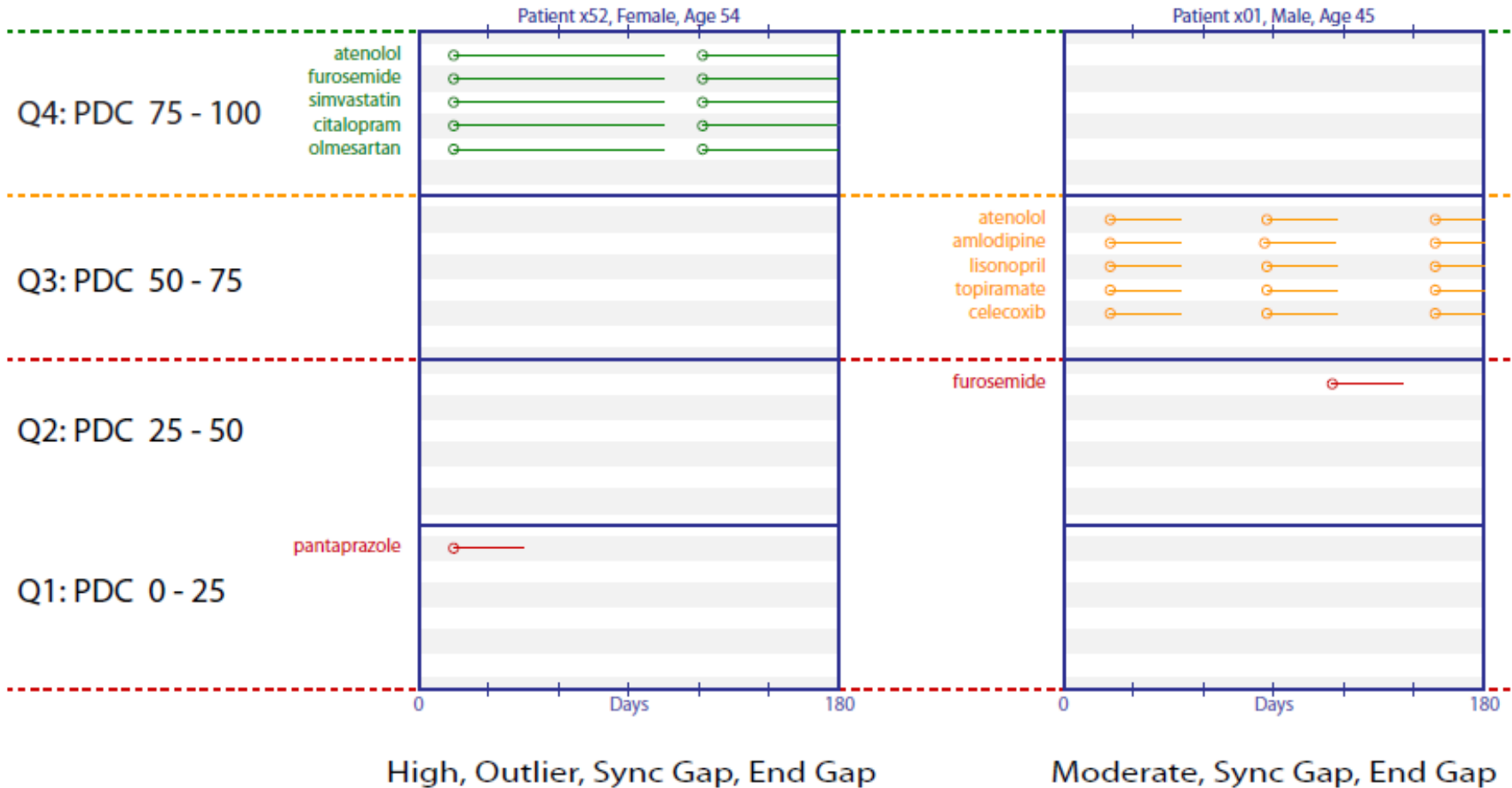


- Claims-based medication adherence measures are based on how often medication was available to the patient during a given period of time
- Percentage of Days Covered (PDC) is the most widely accepted (and superior) method.
- 80% is widely used as the adherence threshold.

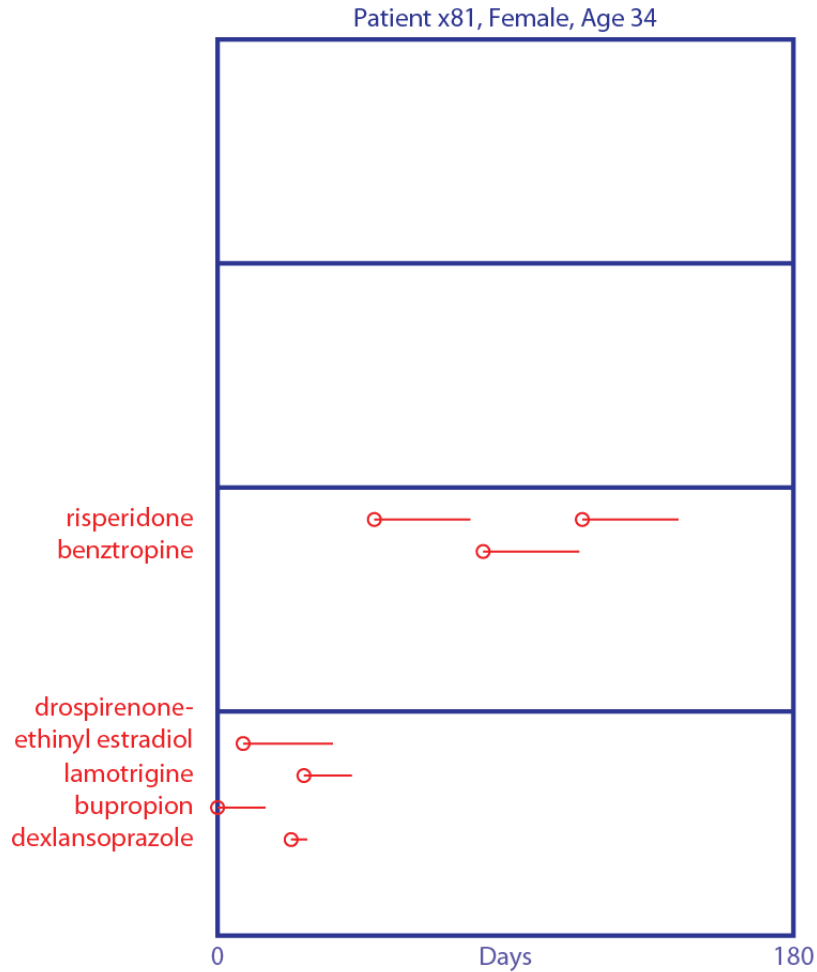
Adherence Pattern Graphics



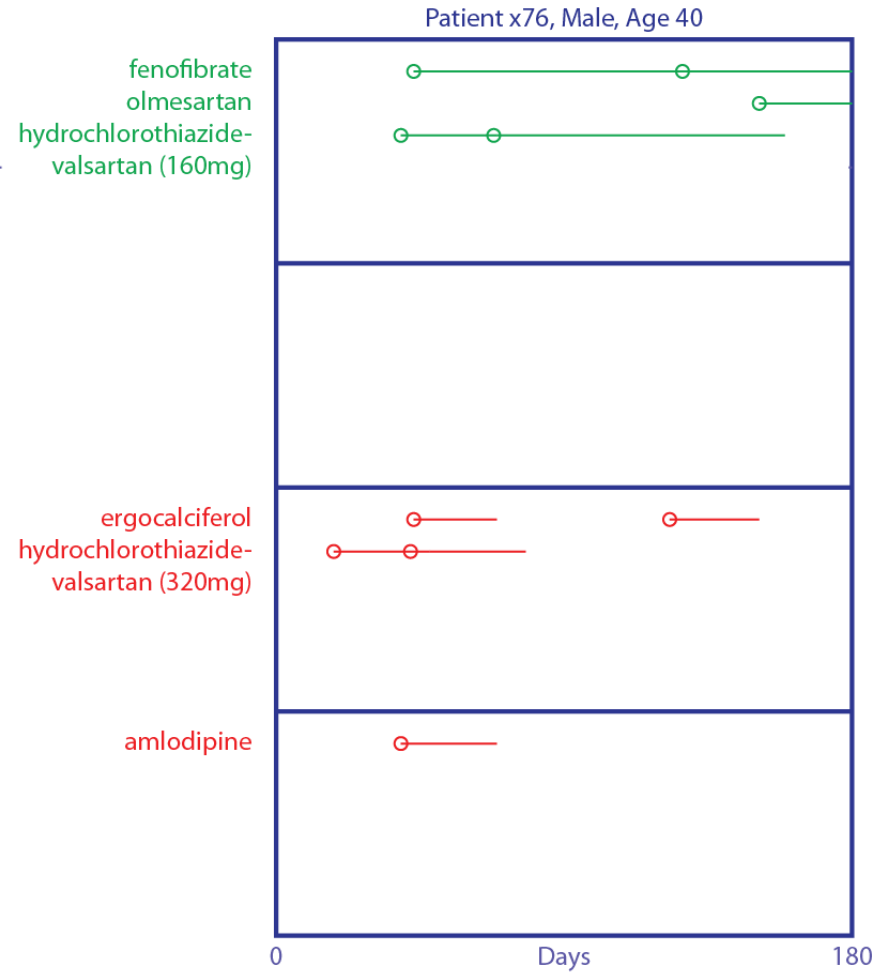
Adherence Pattern Graphics



Adherence Pattern Graphics

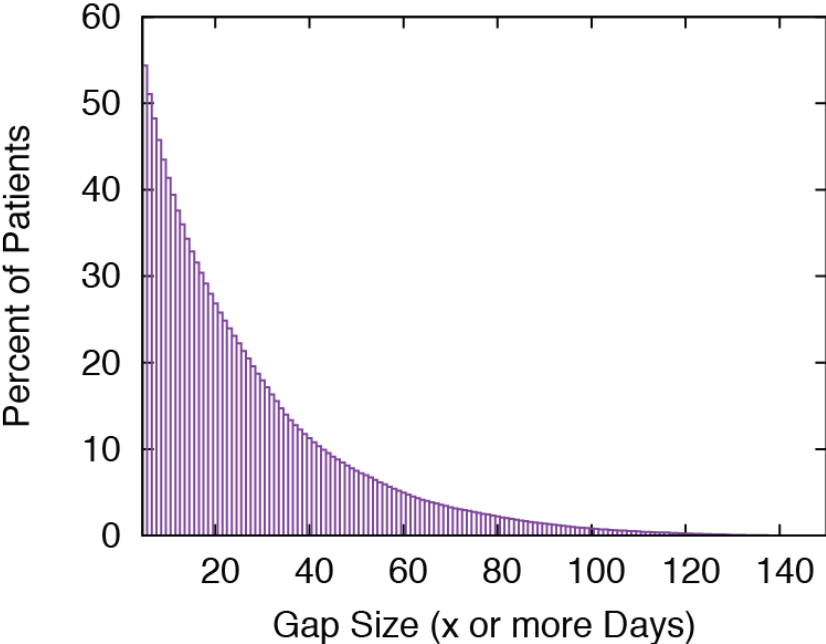
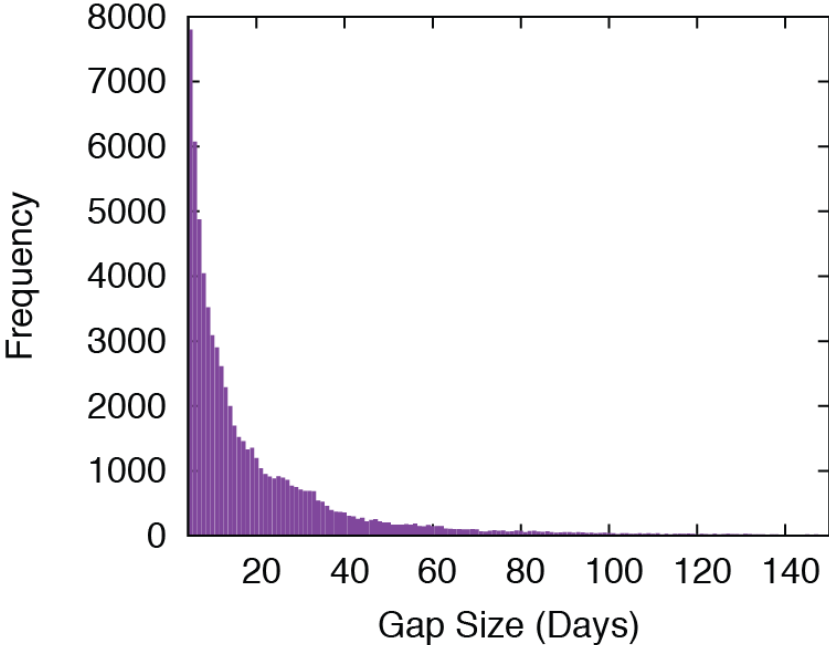


Low, End Gap



Mixed, End Gap

Gap Distributions



Label Distributions

| | Total | | Outlier | | Overpossession | | End Gap | | Sync Gap | |
|----------|--------|---------|---------|-------|----------------|-------|---------|--------|----------|-------|
| High | 26,373 | (53.5) | 1,449 | (5.5) | 951 | (3.6) | 2,185 | (8.3) | 765 | (2.9) |
| Moderate | 4,384 | (8.9) | 35 | (0.8) | 5 | (0.1) | 1,442 | (32.9) | 225 | (5.1) |
| Low | 5,706 | (11.6) | 187 | (3.3) | 0 | (0.0) | 5,009 | (87.8) | 58 | (1.0) |
| Mixed | 12,843 | (26.0) | NA | | 251 | (2.0) | 9,851 | (76.7) | 984 | (7.7) |
| Total | 49,306 | (100.0) | 1,671 | (3.4) | 1,207 | (2.4) | 18,487 | (37.5) | 2,032 | (4.1) |

- Among patients with average PDC score between 50-75, a mixed pattern is 3 times more likely than consistent moderate adherence
- Moderate pattern is usually due to temporary gaps
- Low pattern is usually due to non-persistence, including the low end of the mixed pattern

Relationship to Patient Outcomes

| | High | Moderate | Low | Mixed |
|---------------------|--------|----------|---------|---------|
| Count | 24,110 | 3,964 | 5,132 | 11,720 |
| Average PDC | 0.93 | 0.63 | 0.29 | 0.64 |
| Cost (PMPM) | 858.14 | 740.68 | 1045.99 | 1454.61 |
| Inpatient Days (PM) | 0.2959 | 0.2762 | 0.4799 | 0.6538 |
| ED Days (PM) | 0.0018 | 0.0013 | 0.0033 | 0.0032 |

Distribution of Inpatient Days by Label

