Definitions

**Adherence**: the extent to which a person’s behavior taking medication, following a diet, and/or executing lifestyle changes corresponds with agreed recommendations from a health care provider.

**Medication Adherence**: is a collaborative process of communication and understanding between the patient and their health care professionals that promotes optimal usage of medication therapies.

\[
\text{# of pills absent over a period of time} \times 100\% \geq 80\%
\]
\[
\text{# of pills dispensed over a period of time}
\]

World Health Organization, 2003; Mayo Clinic, 2011; Osterberg L, Blaschke T, 2005; Winkler A, et al., 2002
Non-Adherence

Prescribed: 100%
Filled: 88%
Started: 76%
Continued: 50%

Medication prescribed in clinic/office
Medication dispensed in pharmacy
Medication taken by patient
Measures of Adherence

Clinical Reporting System (CRS)

Pharmacy Quality Alliance (PQA) report

- Proportion of Days Covered (PDC)
- Gaps in Therapy
PDC Measure Logic

• Two prescriptions during the reporting period
  • Prescriptions are based on drug class, not individual drugs
• First prescription must be dispensed before or during the report period and must be >90 days before the end of the report period
• The measure counts the number of days that the patient was dispensed medication:
  • from the (a) first date of the reporting period or (b) first date of dispensing
  • until (a) the end of the report period or (b) discontinuation of the drug class
PDC: Diabetes Medications

Proportion of Days Covered > 80%
Gap in Therapy > 30 days

<table>
<thead>
<tr>
<th>Medication</th>
<th>Proportion</th>
<th># of patients prescribed for reports in 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biguanide</td>
<td>61%</td>
<td>56,048</td>
</tr>
<tr>
<td>Sulfonylurea</td>
<td>60%</td>
<td>28,205</td>
</tr>
<tr>
<td>TZD</td>
<td>56%</td>
<td>6,702</td>
</tr>
<tr>
<td>DPP IV</td>
<td>51%</td>
<td>10,288</td>
</tr>
</tbody>
</table>
PDC: HTN Medications

- **Beta Blocker**: 48% Proportion of Days Covered > 80%, 51% Gap in therapy > 30 days
- **RASA**: 47% Proportion of Days Covered > 80%, 52% Gap in therapy > 30 days
- **CCB**: 51% Proportion of Days Covered > 80%, 49% Gap in therapy > 30 days
- **Statin**: 44% Proportion of Days Covered > 80%, 55% Gap in therapy > 30 days

# of patients prescribed for reports in 2014:
- Beta Blocker: 42,955
- RASA: 104,180
- CCB: 30,472
- Statin: 69,617
PDC: Diabetes Medications (cont.)

PDC = Portion of days covered ≥ 80%   GAP = gap in therapy ≥ 30 days


For internal IHS use ONLY. Data from 164 sites (100 Tribal & 64 IHS). Collected from ONM reports 2013.
PDC: HTN Medications (cont.)

PDC=Portion of days covered ≥ 80%  GAP = gap in therapy ≥ 30 days


For internal IHS use ONLY. Data from 164 sites (100 Tribal & 64 IHS). Collected from ONM reports 2013
PDC: Statin Medications

PDC=Portion of days covered ≥ 80%   GAP = gap in therapy ≥ 30 days

PDC and GAP: 2011 – 2014

For internal IHS use ONLY. Data from 164 sites (100 Tribal & 64 IHS). Collected from ONM reports 2013.
PDC: Antiretrovirals

PDC = Portion of days covered ≥ 90%

PDC: 2011 – 2014

Higher is better

# of patients prescribed for reports in 2014

312

For internal IHS use ONLY. Data from 164 sites (100 Tribal & 64 IHS). Collected from ONM reports 2013
Barriers are individualized to the patient

Dimensions of Adherence

Adherence decreases as the number of barriers for the patient and provider increases.

Osterberg L, Blaschke T, 2005
Simplify the regimen
Impart knowledge
Modify patient beliefs and human behavior
Provide communication and trust
Leave the bias
Evaluating adherence
Med Synchronization
Medicare Advantage and prescription drug (Part D) plans

- Part D medication adherence for oral diabetes medications (taking oral diabetes medication as directed)
- Part D medication adherence for hypertension (taking blood pressure medication as directed)
- Part D medication adherence for cholesterol (taking statins as directed)
Resources

http://www.scriptyourfuture.org/medication-adherence/