Patients with diabetes are known to have higher 30 day readmission rates (14.4-21.0%) compared to the general inpatient population (8.5-13.5%). The need to develop and test the feasibility and efficacy of transitional care strategies aimed at reducing readmissions has grown in importance. More research is needed to develop a standardized transitional care program for these high-risk diabetes patients during and after hospitalization.

A number of strategies have shown promise. This interactive workshop will provide the opportunity to discuss the benefits and barriers to designing and implementing several transitional care strategies known to prevent readmission. Discussion topics will include:

- Identifying high risk patients
- Obtaining and utilizing A1c results during hospital stay
- Improving prescription writing
- Med-to-Bed medication delivery
- Diabetes self-management education
- Follow up phone calls
- Follow up visits

References:


Preventing Readmissions in Diabetes Patients: Strategies That Succeed

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30-Day Readmissions: How Bad Is It?
- General Inpatient Population: 8.5-13.5%
- Inpatients with diabetes: 14.4-22.7%
- Risk Factors: co-morbidities, ED admission, low socioeconomic status, public insurance, racial/ethnic minority, recent admission


What We Will Discuss Today: Transitional Care Strategies That Help Lower Risk of Readmission
- Identifying high risk patients
- Obtaining & utilizing A1c results during hospital stay
- Improving prescription writing
- Med-to-Bed medication delivery
- Diabetes self-management education
- Follow up phone calls
- Follow up visits

Strategies That Succeed: Obtaining & Utilizing A1c

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<th>Strategy</th>
<th>Barriers</th>
<th>Possible Solutions</th>
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Benefits of Obtaining A1c

Why order A1c sooner rather than later:
- Diagnose diabetes in patients with new hyperglycemia
- Get result before patient condition changes e.g. transfusion, dialysis
- Inform insulin requirements during hospitalization
- Guides diabetes medication discharge plan recommendations using algorithm (Umpierrez, Reyes & Smiley, 2014)

Presenter Disclosure Information
In compliance with the accrediting board policies, the American Diabetes Association requires the following disclosure to the participants:

Jane Jeffrie Seley
Research Support: None
Employee: None
Advisory Panel: Boehringer-Ingelheim/Lilly Alliance, Sanofi Diabetes, Novonordisk, Abbott Nutrition
Stock/Shareholder: None
Consultant: Johnson & Johnson Diabetes Institute, Bayer Diabetes
Other: None
**NYP/Cornell Transition Guide To Home Using A1c**

<table>
<thead>
<tr>
<th>A1c &lt; 7%</th>
<th>A1c 7-9%</th>
<th>A1c &gt; 9%</th>
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</table>
| Return to same home regimen unless contraindicated | Restart home regimen if not contraindicated, keep basal at 50-100 % of inpatient dose | **Best option:** Basal insulin at 75-100% of current dose & bolus insulin with meals at fixed or calculated dose. **Other options:**
  - Basal Plus (basal insulin + bolus insulin at largest meal)
  - Pre-mixed insulin before breakfast & dinner
  - basal insulin once daily + regapride with meals
  - Basal insulin once daily & GLP-1 injectable daily or weekly or basal/GLP-1 combo |

**Basal insulins:** aspart, lispro, glulisine. **Pre-Mixed insulins:** 70/30 & 75/25. **Basal insulins:** degludec U100 & U200, detemir, glargine U100 & U300. 

Adapted with permission from algorithm by Umpierrez, G, et al Diabetes Care 2014

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**Barriers to Obtaining A1c at NYP/WC**

- 80 charts were found to have 2 or more BGs >180 mg/dL in 24 hours, A1c requested by research assist
- Took 1-3 days with multiple requests to get A1c ordered on 48 of the 80 patients with hyperglycemia.
- 32 of the 80 patients never had an A1c ordered prior to discharge.

**Lesson Learned:** Currently changing A1c in insulin order set to be auto-selected to facilitate timely result

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**Strategies That Succeed: Prescription Writing**

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**Preventing Readmissions**

**Barrier:** “Right” Prescriptions

- Number of Incomplete/Incorrect Prescriptions

- 78.3% of the 95.9% of pts with Rx’s for insulin had no Rx’s for needles

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**Ordering Insulin & Diabetes Supplies in EMR:**

- **Check Edit & free-text orders for all supplies EXCEPT Insulin Pens**
- **Drug Search Term Instructions**

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<th>Drug Search Term</th>
<th>Instructions</th>
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**Diabetes RXs:**

Using Prescription Software in EMR

- **Dispense:** Test strips & Lancets
  - Test BO __ a day
### Strategies That Succeed: Steps for Med-to-Bed Delivery

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### Med-To-Bed at NYP/Cornell

- **How We Resolve Incomplete/ Incorrect RXs**
  - Distributed *Glycemic Management* pocket card to educate prescribers in correct Rx writing for diabetes medications & supplies
  - Make Med-to-Bed standard of care to facilitate medication reconciliation of discharge prescriptions with insurance coverage/cost prior to discharge
  - Work with med-to-bed pharmacy to help identify missing RXs e.g. needles, BGM supplies, decision tree if med is not covered (best alternative), ongoing education for med-to-bed pharmacists in current diabetes management

### Diabetes Self-Management Education

- **Promote EARLY Diabetes Education**
  - Alert Bedside RN to educate high-risk patients as soon as patient is ready to learn
  - Use routine BG monitoring, insulin administration & meal trays as teaching moments
  - Improve RN access to diabetes self-management tools: self-care guides, insulin pen training kit & blood glucose meter to take home
  - Diabetes Champions on Key Units to assist with education, resources, achieving glycemic targets

### Med-To-Bed Barriers at NYP/Cornell

**Results:** 61.1% (n=22) received medication reconciled to match insurance and delivered to bedside prior to discharge

**Barrier:** Delays in obtaining RX to send to med-to-bed pharmacy, Study Med-to-Bed pharmacy didn’t check for missing RXs e.g. needles, test strips despite education

**Reason for delay in writing RX:** Prescriber uncertainty about what meds/doses patient would go home on

**Lesson Learned:** Get RXs for current Diabetes Meds at current dose to check which insulin/devices are covered


### Diabetes Teaching Resources

- **Teaching Checklist In EMR**
- **Practice Pens**
- **Handouts in Multiple Languages**
- **Free Meters**
Preventing Readmissions:
**Best Strategy:**
Diabetes Education

75% of the 8 patients who had no diabetes education were readmitted within 30 days.


### Strategies That Succeed:
**Follow-Up Phone Calls & Visits**

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<td>Follow-Up Visit</td>
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### 3 Day Follow-Up Call Data

**Results:**
- 25.0% (n=9) answered 3 day follow-up phone call.
- Patients who were readmitted were asked why they didn’t answer the phone.
- Most common response?


### 7-Day Follow-Up Visit Data

**Results:**
- 13.8% (n=5) attended the follow-up visit within 7 days.
- Reasons for not attending:
  - Transportation most common reason, returned to work, caring for others (child, spouse)


### Key Recommendations at NYP/Cornell

**Standardized Diabetes Transitional Care Plan:**

**Discharge Prescriptions:**
- Glycemic Management pocket card education
- Med-to-Bed Walgreens delivery as standard of care

**Diabetes Self-Management Education:**
- Empower beside nurse to make diabetes education a priority, expand role of diabetes champions
- Improve access to & comfort with teaching resources

### Project Team

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**Selected References**


