The APP and Dialysis: Shaping the Future of Patient Care

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Objectives

• Understand how the APP can improve quality of care for the dialysis patient

• Discuss the role of the APP in the shortage of pediatric nephrologist

• Identify the role of the APP through transitions of care for children with CKD
Patient Care

- APP
- Nephrologist
- QOL/School Liaison
- Nurse
- Dietician
- CLS/Music therapist
- Renal Psychologist
- Social Worker
Quality of primary care by advanced practice nurses: a systematic review

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# Quality Care by APPs

## Table 2 Selected outcomes results

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Outcomes: APN group vs. physician group</th>
<th>Patient satisfaction (Instrument)</th>
<th>Cost</th>
<th>Healthcare resource utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dierick-van Daale, 2009, 2010*</td>
<td>Physiologic</td>
<td>8.2 ± 1.2 vs. 8.2 ± 1.3 (Investigator-developed instrument)</td>
<td>Direct cost per consultation based on salary (euros): 31.9 ± 36.3 vs. 40.2 ± 49.9***</td>
<td>Consultation duration (min): 12.2 vs. 9.2*</td>
</tr>
<tr>
<td>Houweling, 2011</td>
<td>Change (95% CI) over 14 months: Cholesterol/HDL ratio: −0.4 (0.1, −0.6) vs. −0.9 (−0.5, −1.4)***</td>
<td>66.4 vs. 51.7% (PEQD)</td>
<td>Referrals (percent of consultations): 12.0 vs. 14.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Systolic BP: −7.4 (−3.8, −10.9) vs. −5.6 (−2.3, −8.8) mmHg</td>
<td>N/A</td>
<td>Number of prescriptions per consultation: 1: 55.0 vs. 54.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diastolic BP: −3.2 (−1.3, −5.2) vs. −1.0 (−0.8, −2.8) mmHg</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Cholesterol: −0.1 (−0.3, 0.1) vs. −0.05 (−0.2, 0.1) mmol/l</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cholesterol/HDL ratio: 0.03 (−0.1, 0.2) vs. 0.07 (−0.1, 0.2)</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HbA1c: −0.09 (−0.3, 0.1) vs. 0.03 (−0.2, 0.3)%</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APRNs performed as well as physicians in terms of clinical outcomes and patient satisfaction

Patient outcomes

SCOPE Collaborative

Standardizing Care

Immunization Schedules

Anemia Management

Renal Osteodystrophy Management
Example of APP led QI project

Example of APP led QI project

• Increasing vaccination rates in a pediatric chronic hemodialysis unit

Increasing immunization rates

Protocol Development

Protocol Development

Patient Outcomes

• Hospitalization/Readmission rates
  - Ex: Managing access issues (catheter dysfunction) as an outpatient.
  - Coordinating care to prevent unnecessary hospitalizations
Patient Satisfaction

It’s time to administer the patient satisfaction survey.
Staff Satisfaction

• APPs provide support for the Nursing and Allied Health Team
  - Readily available for patient assessment and interventions if becoming unstable
  - APPs focus on holistic care
    • Referrals to other disciplines
Pediatric Nephrologist Shortage

CLAMP! SO, STAFF SHORTAGES ARE GETTING SERIOUS!
Pediatric Nephrologist Shortage

Provider shortage

• Potential shortage of pediatric nephrologist

• ~38% of pediatric nephrology fellowships were unmatched

• The average age of pediatric nephrologist is increasing

• Potential impact of Physician Extenders on the pediatric workforce needs to be followed closely
APP role in provider shortage

• Using a multi-disciplinary team approach with Pediatric Nephrologist and APPs improves the coordination of care.

• APPs can improve timely delivery of patient care by adding support for placing orders, obtaining consents for procedures, completing consults, etc.
APP Role in education

• Education for Residents
  - Rotations in the dialysis unit with APPs to demonstrate ESRD care

• Education for Fellows
  - APP has consistent presence available for guidance and education during rotations
  - Understand the best model for education and adapt as needed based on your institution
Fellow/APP partnership

• Anticipated issues
  - Caregivers often see APPs as the point of contact for questions and concerns
  - Nursing staff are often use to notifying the APP

• Possible solutions
  - Clear introduction of the Fellow’s role while in the dialysis rotation
Transitions of care

• CKD → ESRD

• Dialysis → Transplant

• Pediatric → Adult

• Hemodialysis → Peritoneal dialysis (or vice versa)
APP role in transitions of care

• Fill knowledge gaps for patients and families

• Assess health literacy to determine best teaching methods

• Facilitate communication between teams

• Collaborate with interdisciplinary team members
Summary

• The future of patient care is getting very complex

• There are changing demands of the healthcare system

• The APP is the solution to ensure consistent quality patient care
Questions

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References


