Team-Based Solutions to Enhance COPD Care

The COPD Patient Journey Speaker Presentation

Sponsored by Boehringer Ingelheim
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Leonard M. Fromer, MD, received his medical degree *magna cum laude* from the State University of New York, Downstate Medical Center. He is a Fellow of the American Academy of Family Physicians and a diplomat of both the American Board of Family Practice and the National Board of Medical Examiners. He has been in private practice with Prairie Medical Group in Santa Monica, California, for 28 years, serving on the group’s Board of Directors and as Managing Director and Chief Financial Officer.

As Executive Medical Director of the Group Practice Forum, Dr. Fromer leads a team engaged in national projects to help group practices achieve success in their clinical integration efforts. He is a member of the board and clinical integration consultant to TransforMED, LLC, whose focus is practice redesign with the aim of meeting the needs of both patients and practices. Dr. Fromer sits on the California Department of Health Services IMAP Advisory Panel for Allergy and Asthma.

Dr. Fromer is a past president of the California Academy of Family Physicians and has served over ten years as a member and Chairman of the American Academy of Family Physicians Commission on Health Care Services. He has also served on the Physicians Capital Source Project Steering Committee for the American Medical Association, the Advisory Board of Directors for the American Medical Informatics Association, and the Advisory Board for the World Foundation for Studies of Female Health. Dr. Fromer has lectured extensively on the topics of allergy, asthma, and health-system reform, and has been featured on CBS News, ABC News, and in the *Wall Street Journal.*
COPD: Current Guideline Definitions

- **GOLD 2013**—“...common preventable and treatable disease...characterized by persistent airflow limitation that is usually progressive and associated with an enhanced chronic inflammatory response in the airways and the lung to noxious particles or gases. Exacerbations and comorbidities contribute to the overall severity in individual patients.”

- **ATS/ERS**—“...preventable and treatable disease state characterised by airflow limitation that is not fully reversible. The airflow limitation is usually progressive and is associated with an abnormal inflammatory response of the lungs to noxious particles or gases, primarily caused by cigarette smoking. Although COPD affects the lungs, it also produces significant systemic consequences.”

- **CTS**—“...respiratory disorder largely caused by smoking that is characterized by progressive, partially reversible airway obstruction, systemic manifestations, and increasing frequency and severity of exacerbations.”

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The Changing Face of COPD: More Women

- Prevalence of COPD from 1998 through 2009 was significantly higher among women than men
- According to data from the 2011 Behavioral Risk Factor Surveillance System (BRFSS), 6.7% of women reported having ever been told by a physician that they had COPD compared with 5.2% of men

Prevalence of Current Smoking and COPD in Florida

No. of Deaths With COPD as the Underlying Cause in Florida (2005): 9,173³

Percentage of Adults With COPD (2011): 7.1%²

Adult Smoking Rate (2011): 19.3%¹

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THE COPD PATIENT JOURNEY
Let’s Begin the Patient Journey With Stan

Stan: 55-year-old white man presents at the office for an assessment

<table>
<thead>
<tr>
<th>Reason for the Visit</th>
<th>Medical History, Exam, Diagnosis, Treatment Initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Bothersome” cough of at least 4 wk’ duration</td>
<td>Patient history</td>
</tr>
<tr>
<td>Cough is productive, and patient reports having some trouble breathing</td>
<td>• 35-year history of smoking</td>
</tr>
<tr>
<td>Currently not taking medication to treat symptoms</td>
<td>• Currently is not taking any medications</td>
</tr>
<tr>
<td></td>
<td>Exam/testing/diagnosis</td>
</tr>
<tr>
<td></td>
<td>• Characterization of cough, timing, color of sputum, etc.</td>
</tr>
<tr>
<td></td>
<td>• Patient history, findings from exam, and spirometry results indicate GOLD 2 moderate COPD with partial reversibility</td>
</tr>
<tr>
<td></td>
<td>Treatment Considerations</td>
</tr>
<tr>
<td></td>
<td>• Aggressive measures to promote smoking cessation</td>
</tr>
<tr>
<td></td>
<td>• Therapy to promote bronchodilation</td>
</tr>
<tr>
<td></td>
<td>• Treatments to reduce exacerbations</td>
</tr>
</tbody>
</table>
Becoming Acquainted With Stan

- **Personal/Social History**
  - Lives with a significant other
  - Patient says he’s “barely smoking these days but has a 35-pack-year history”; significant other smokes ~1 pack/day

- **Medical History**
  - Last visited his doctor 2 years ago but has been at an emergency care site 2 other times in the past 8 months
  - Patient says doctor did some air test and told him he had a “mild case of asthma”
  - Was given short-acting $\beta$-agonist (SABA) to treat symptoms of mild asthma
  - Patient used all his refills for the SABA; says he’s “been having too many of these bouts of breathlessness” and lately has been coughing “day and night”
    - Cough is “bothersome” and productive
  - Wants more of “that medicine to take care of his lung problems”
Diagnosis, Assessment and Treatment of COPD

- Screening Tools
- Diagnostic and Staging Tools
- Communication
Population Management Tool: COPD Population Screener™ (COPD-PS)

- Simple, validated questionnaire that can help identify people aged ≥35 in the general population who are at risk for COPD
- Identifies COPD symptoms and risks, as well as considers age as a screening factor
- This tool may lead to:
  - Increased awareness of COPD
  - Earlier symptom recognition
  - Use of spirometry for accurate diagnosis
- Web site
  - Available at www.copdscreener.com

Diagnostic Tools
Interpreting Spirometry Results

Normal Values of Pulmonary Function Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Normal Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEV₁</td>
<td>80% to 120%</td>
</tr>
<tr>
<td>FVC</td>
<td>80% to 120%</td>
</tr>
<tr>
<td>FEV₁/FVC</td>
<td>Within 5% of predicted ratio</td>
</tr>
</tbody>
</table>

The presence of a post-bronchodilator FEV₁/FVC < 0.70 confirms the presence of persistent airflow limitation and, thus, COPD.

Classification of Severity of Airflow Limitation in COPD (in patients with FEV₁/FVC < 0.70)

<table>
<thead>
<tr>
<th>GOLD 1</th>
<th>Mild</th>
<th>FEV₁ ≥80% predicted</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOLD 2</td>
<td>Moderate</td>
<td>50% ≤FEV₁ &lt; 80% predicted</td>
</tr>
<tr>
<td>GOLD 3</td>
<td>Severe</td>
<td>30% ≤FEV₁ &lt; 50% predicted</td>
</tr>
<tr>
<td>GOLD 4</td>
<td>Very Severe</td>
<td>FEV₁ &lt; 30% predicted</td>
</tr>
</tbody>
</table>

Health literacy is the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions

Health literacy affects people’s ability to:

- Navigate the health care system, including filling out complex forms and locating providers and services
- Share personal information, such as health history, with providers
- Engage in self-care and chronic-disease management
- Understand concepts such as probability and risk

Low literacy can affect health outcomes:

THE PATIENT JOURNEY

- Assess health literacy
- Explain importance of adherence and have patient sign adherence contract
- Patient self-management – measuring and tracking blood pressure
- Pulmonary rehabilitation
- Engage significant other in management plan

Indications of Limited Health Literacy

Behaviors that may suggest literacy problems

- Frequently missed appointments
- Patient registration forms that are incomplete or inaccurately completed
- Nonadherence with medication regimens
- Patients say they are taking their medications, but laboratory tests or physiological parameters do not change in the expected fashion
- Reluctance to take written materials along with reliance on oral explanations and demonstrations of tasks
- Having intermediaries serve as surrogate readers

Responses to receiving written instructions

- “I forgot my glasses”
- “I’ll read this when I get home”
- “Can you read this to me?”
- “Let me bring this home so I can discuss it with my children”

Responses to questions about medication regimens

- Unable to name medications and explain what they’re for

Goals for Treatment of Stable COPD According to GOLD 2013

- Relieve symptoms
- Improve exercise tolerance
- Improve health status
  \[\textit{and}\]
- Prevent disease progression
- Prevent and treat exacerbations
- Reduce mortality

\[\text{Reduce Symptoms}\]
\[\text{Reduce Risk}\]

According to the GOLD 2013 Algorithm for Grading Airflow Limitation, Stan Has GOLD 2 Moderate COPD

<table>
<thead>
<tr>
<th>Grade</th>
<th>Severity</th>
<th>Spirometric Measurement</th>
</tr>
</thead>
</table>
| GOLD 1  | Mild          | • FEV\textsubscript{1}/FVC <0.70  
               • FEV\textsubscript{1} \geq 80\% predicted              |
| GOLD 2  | Moderate      | • FEV\textsubscript{1}/FVC <0.70  
               • 50% \leq FEV\textsubscript{1} <80\% predicted          |
| GOLD 3  | Severe        | • FEV\textsubscript{1}/FVC <0.70  
               • 30% \leq FEV\textsubscript{1} <50\% predicted          |
| GOLD 4  | Very severe   | • FEV\textsubscript{1}/FVC <0.70  
               • FEV\textsubscript{1} <30\% predicted                   |

Changing Attitudes: Adherence Is Not Solely a Patient Problem

Adherence Can be an Issue for COPD Care

“Extent to which a patient’s behavior (in terms of taking medication, following a diet, modifying habits, or attending clinics) coincides with medical or health advice”

Terminology is “intended to be non-judgmental, a statement of fact rather than of blame of the prescriber, patient, or treatment”

Synonyms:
Compliance
Concordance

McDonald HP et al. JAMA. 2002;288:2868-2879.
Possible Components of Hospital/ED Care Documentation

✓ Reason for stay/visit with specific principal diagnosis and important findings
✓ Description of procedures performed and care, treatment, and services provided to patient
✓ List of acute medical issues, tests, and studies for which confirmed results were pending at time of discharge and need follow-up
✓ Complete medication list
✓ Description of patient’s condition at discharge
✓ Information about consultative services, if appropriate
✓ Full information provided to patient

Patient Dashboard: A Management Tool for Both Patients and Physicians

Dashboard displays key data and trends
Illustrates patient’s current status and activity over time

Individual patient trends can be compared versus a comparative element
(eg, the group practice, region, nation, other)

For physicians, dashboards can help to determine if they’re meeting targets
Comparatives can be internal (among peers) and/or external

Initial Visit

<table>
<thead>
<tr>
<th>Test</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height/Weight/BMI</td>
<td>5’11”/144 lb/20.1 kg/m² (normal weight)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>GOLD 2 moderate COPD</td>
</tr>
<tr>
<td>Initial Treatment</td>
<td>GOLD 2 Moderate COPD</td>
</tr>
<tr>
<td>Considerations</td>
<td>• Aggressive measures to promote smoking cessation</td>
</tr>
<tr>
<td></td>
<td>• Therapy to promote bronchodilation</td>
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</table>
TRANSITIONS OF CARE IN CHRONIC DISEASE MANAGEMENT
Coordination of Care and Transitions of Care

Coordination of Care

Deliberate organization of patient care activities among 2 or more participants, including the patient and/or family, to facilitate the appropriate delivery of health care services

Involves organizing personnel and other resources to carry out all required patient care activities

Often managed by the exchange of information among individuals responsible for different aspects of care

Transitions of Care

The movement of patients between health care locations, providers, or different levels of care within the same locations as their conditions and care needs change

Within settings (eg, ED to observation unit; ICU to ward)

Between settings (eg, hospital to subacute care; ambulatory clinic to senior center)

Across health states (eg, curative care to hospice; ED/hospital to home care)

Between providers (eg, generalist to specialty provider; home care practitioner to PCP)

Transitions of Care Begin At Patient Presentation

COLLABORATION & COMMUNICATION

Build relationships with all team members and the patient who is at the center of the collaborative model

Create awareness of patient and provider accountability for receiving and sending patient care information to and from care settings

Communicate with other professionals/organizations, delineating responsibilities

Provide services within the bounds of professional competency and refer patient as needed

Engage Patient in Care

- Maximize patient involvement in all phases of care by promoting self-determination and informed decision making
- Provide educational information to support the patient’s participation in the care plan
- Protect patient’s right to privacy and safeguard confidentiality when releasing patient information
- Affirm patient dignity and respect cultural, religious, socioeconomic, and sexual diversity
- Assess and promote the patient’s efforts to participate in the care plan

Transitions of Care

PATIENT EDUCATION
Care planning
- Review plan with patient, assess understanding, and seek to answer questions/clarify

Information and advice about reducing risk factors
- Smoking cessation—the 5 Rs
  - Relevance: patient’s personal relevance of quitting
  - Risks: negative consequence of smoking
  - Rewards: what does the patient see as benefits
  - Roadblocks: barriers to patient quitting
  - Repetition: takes multiple attempts to quit
- Immunizations, including the annual seasonal influenza vaccine, pneumococcal vaccine, and other vaccines that may be recommended as a result of an outbreak or risk of outbreak
- Eliminate or minimize exposure to environmental risks (eg, occupational/environmental inhaled toxic substances)

Information about COPD

Instruction on how to use inhalers and other treatments

Recognition and treatment of exacerbations

Pulmonary rehabilitation

Transitioning to the Next Care Setting: A Checklist for Promoting Continuity and Coordination

- Does the patient have a primary care provider (PCP)?
  - Send assessment information to PCP (date: __________)

- Does the patient have a specialty care provider (eg, pharmacist, pulmonologist, social worker, home care director, other)?
  - Send assessment information to PCP and specialty care provider(s) (date: __________)

- Does the patient have an outpatient case manager who should be notified?
  - Send assessment information to outpatient case manager (date: __________)

- Ensure all transition services and care (eg, medications, equipment, home care, other) are coordinated and documented (date: __________)

- Ensure patient and family/caregiver understand all information and have a copy of the care plan with them (date: __________)

- Ensure patient and family/caregiver have appropriate contact information for questions or urgent/emergent care (date: ______)

- Schedule appointment for follow-up visit with physician

**Assessing Patient’s Attitude About and Adherence to Medications: An Evidence-based Tool** *1,2*

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No/Comment</th>
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<tbody>
<tr>
<td>Do you ever forget to take your medicine?</td>
<td></td>
</tr>
<tr>
<td>Are you careless at times about taking your medicine?</td>
<td></td>
</tr>
<tr>
<td>When you feel better, do you sometimes stop taking your medicine?</td>
<td></td>
</tr>
<tr>
<td>Sometimes if you feel worse when you take your medicine, do you stop taking it?</td>
<td></td>
</tr>
<tr>
<td>Do you know the long-term benefit of taking your medicine as told to you by your doctor or pharmacist?</td>
<td></td>
</tr>
<tr>
<td>Sometimes do you forget to refill your prescription medicine on time?</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
</tbody>
</table>

*Based on the modified Morisky Scale.*

Implementing & Improving Transitions of Care
## Shared Responsibilities in Transitions of Care

<table>
<thead>
<tr>
<th></th>
<th>Communicate With Team Members on Issues Related to Patient Care</th>
<th>Assess Patient Care</th>
<th>Perform Discharge Checklist</th>
<th>Medication Review</th>
<th>Medication Reconciliation</th>
<th>Self-management Education</th>
<th>Patient/Family Education</th>
<th>Assess Cultural Competency/Health Literacy</th>
<th>Transfer Records to Next Care Setting</th>
<th>Update EMR</th>
</tr>
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<tbody>
<tr>
<td><strong>Case Manager</strong></td>
<td>✓ Date</td>
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<tr>
<td><strong>MD</strong></td>
<td>✓ Date</td>
<td>✓ Date</td>
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</tr>
<tr>
<td><strong>Nurse/NP/PA</strong></td>
<td>✓ Date</td>
<td>✓ Date</td>
<td>✓ Date</td>
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<td>✓ Date</td>
<td>✓ Date</td>
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</tr>
<tr>
<td><strong>Office staff</strong></td>
<td>✓ Date</td>
<td>✓ Date</td>
<td>✓ Date</td>
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<td>✓ Date</td>
<td>✓ Date</td>
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</tr>
<tr>
<td><strong>Social Worker</strong></td>
<td>✓ Date</td>
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<td>✓ Date</td>
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Summary & Conclusion
Incorporate COPD Into Your BUSY Practice

Consider screening patients who are at risk for COPD
Enhance patient-physician communication; use handheld devices and screening tools

Confirm diagnosis with spirometry

Consider multimodal treatment strategies
Pharmacotherapy, pulmonary rehabilitation, and other interventions

Integrate Effective Transitions of Care
Active, engaged, multidisciplinary team
Every COPD patient’s journey (and yours!) will be different. However, common themes may exist.

Consider your patients’ perspectives and ways to break down barriers:
- Assess health literacy, worry, confusion, language issues.

Explore options to motivate and improve self-management.

Is each patient taking medications properly?

Consider your office environment: Is it user-friendly?

The whole can be greater than the sum of its parts: consider group education and group appointments as options.
THANK YOU!