WAY OF WORKING

LUNG PATIENTS

CELLO

Leiden

May 2011

Introduction

CELLO, the cooperation of primary health care practitioners in Leiden and surroundings, is an organisation of independently working general practitioners which started on 1st April 2009. Currently 13 general practitioners are affiliated with Cello. Together they are responsible for the care of approximately 30.000 patients. Cello counts five (part time) practice nurses and two (part time) administrative workers. Interns are placed regularly. The practice nurses and administrative workers are based at a separate location (Doezastraat 1, 2311 GZ Leiden). On 01-01-2010 the cooperation started with the COPD target group and on 01-02-2011 with the Asthma[1] target group.

A Lung Commission is based at Cello, consisting of two general practitioners and two practice nurses. The lung commission supervises and supports the care that is given. They have followed a CASPIR[2] course and attend extra trainings regularly.

Way of working

Application of a patient with (suspicion of) COPD and/or Asthma is done via the chain care computer programme Citokis. An admission form (fax) can also be used. The patient is then invited (with instructions) by Cello to the lung consultation.

During the **first consultation**, the practice nurse conducts a spirometry test[3] and anamnesis. With the patient, the practice nurse determines the focus areas to discuss with the G.P. This information goes to the G.P. via Citokis (and/or via fax). Even before the G.P.'s advice, a follow-up consultation is already planned with instructions (in writing) for a check-up spirometry test[4]. If the G.P wishes a different approach/ timeline, the appointment is changed.

---

[1] As a basis for diagnosis, treatment and referrals, the NHG (Dutch General Practitioner Association) Standards 2007 are used: Asthma/COPD in adults from the NHG Practice Guide Asthma/COPD, diagnostics and treatment

[2] CASPIR stands for **C**OPD, **A**sthma and **Spir**ometry. Various professional associations take part in this project, including CAHAG (COPD & Asthma General Practitioners Advice Group).

[3] The first time a reversibility test will always be conducted, unless the G.P. indicates otherwise. Cello has a separate protocol for conducting spirometry tests and the maintenance of the spirometer.

[4] When suspecting Asthma always conduct a reversibility test prior to which the patient should not use bronchodilators during several hours. COPD patients can use their medication on the day of their (check-up) spirometry test.

After the consultation at Cello, the patient should make **an appointment with their own G.P.** to discuss the outcomes of the spirometry test and the consultation with the practice nurse. The patient receives the diagnosis and the policy/ next steps. This policy is also sent to the practice nurse by the G.P., so that an unambiguous policy can be followed (message via Citokis).
Of course, communication by telephone is always possible between G.P. and practice nurse.

During the **follow-up consultations** with the practice nurse various questionnaires are used. For COPD patients these are the MRC score[5] and CCQ[6] and for Asthma patients the ACQ[7]. These can also be found in the Citokis programme. Where possible, focus is put on the explanation of the clinical picture and treatment/ medication, inhaler instructions and other important points of attention. Of course, the specific issues will vary by patient.

New in the treatment of COPD is the Treatment Standard for COPD formulated by the Dutch Lung Alliance (LAN), which gives attention to the disease burden[8] as experienced by the patient. Cello will wait for the advice of the CAHAG[9] before starting to incorporate this.

Counseling in smoking cessation is not (yet?) reimbursed. The lung commission feels this is an important part of treatment. Therefore, it has been decided to offer each patient one consultation of 30 minutes with the practice nurse. Motivation and treatments options are discussed but where the implementation is concerned, the patient is referred (back) to the G.P.

The G.P. makes the diagnosis and is responsible for further investigation if the diagnosis is not sufficiently clear. The G.P. can discuss problem cases or unclarities with the 'pilot specialist' (regional doctor or specialist connected to Cello). This is R. van Klink, lung specialist at the Diaconessen Hospital, Leiden.

[5] Medical Research Council (MRC) Dyspnoe score, a measurement for dyspnoe, the degree of shortness of breath
[6] Clinical COPD Questionnaire (CCQ)
[7] Asthma Control Questionnaire (ACQ)
[8] Free download on www.longalliantie.nl
[9] CAHAG is the COPD & Asthma General Practitioners Advice Group. It is a network organisation of general practitioners with special interest for COPD and asthma

The **recommended check-up frequency** for COPD patients by their G.P. and practice nurse (based on the NHG – Dutch General Practitioner Association):

Degree of COPD	**Practice nurse**	**G.P.**
GOLD 1 (FEV1 ≥ 80% of the predicted value)	In 1st year 2 x per year or more Spirometry, education, inhaler instructions, symptoms/medication analysis and points of improvement, stop smoking policy Subsequently, check up spirometry once a year (during stabile phase and under own medication spirometry is conducted, before and after additional bronchodilaters, as in post-measurement spirometry) and consultation	1 x per year, upon receival of spirometry test results and subsequently, depending on personal assessment
GOLD 2 (FEV1 80 – 50 % of the predicted value)	For a stable patient: 1-2 x per year (1 x spirometry) and same focus points as above (attention for weight) For non stable patient: Increase consultations	1 x per year Ad hoc in non stable situations, and depending on personal assessment
GOLD 3 (FEV1 50 - 30 of the predicted value)	Patient should be treated by a lung specialist. If not, discuss with G.P.	Referral to lung specialist, if not: in stable situations at least 1 x per year, in non-stable situations ad hoc or depending on personal assessment

The **recommended check up frequency** for Asthma patients by their G.P. and practice nurse (based on the NHG):

Asthma classification	Practice nurse	G.P.
Intermittent asthma (symptoms <1 x per week)		No check-up necessary according to NHG Standard (2007) Formerly 1 x per year to G.P.
Mildly persistent asthma (symptoms >2 x per week)	1 x per 3 to 6 months	Minimum 1 x per year, depending on symptoms
Moderately persistent asthma (not achieving target in spite of 3 months moderate dosage CSI)	1 x per 3 months or more often	Minimum 1 x per year, depending on symptoms
Severely persistent asthma (In case of moderately persistent asthma, not achieving target in spite of medication)	If patient is under treatment by lung specialist, but education is necessary, 2-4 x per year in accordance with specialist / lung nurse	Minimum 1 x per year, depending on symptoms and exacerbations. If necessary, refer to lung specialist.

Not every patient will fit into such a scheme and therefore some degree of flexibility is realistic.

Tasks that are not delegated to the practice nurse are:

- Making the diagnosis
- Defining or changing the treatment policy
- Signing prescriptions

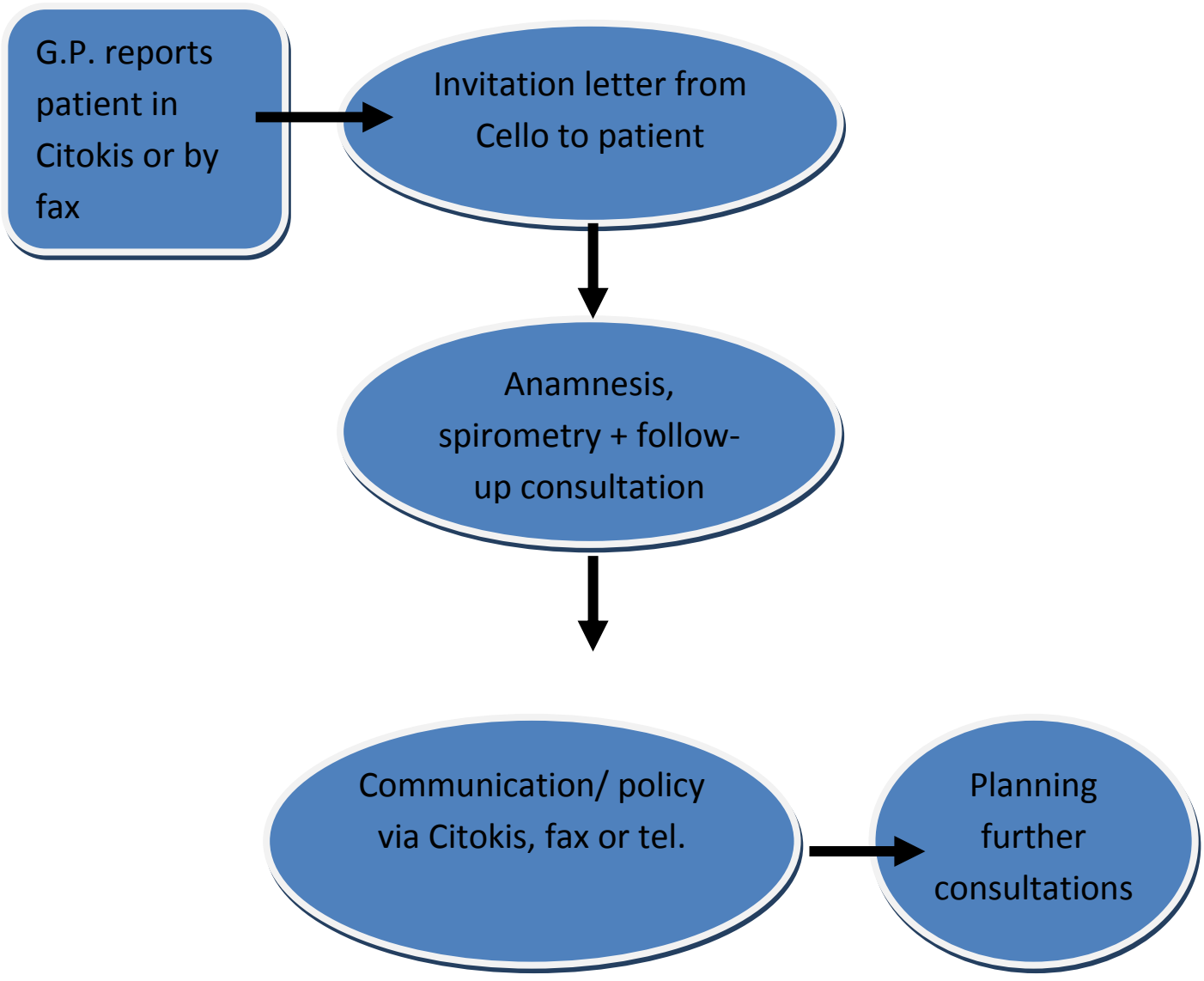
The practice nurses will, after consultation with the Lung Commission, follow the necessary **extra training** in order to provide optimal care. As with Diabetes care, practice nurses can do proposals to improve the care, such as adjustments to the lifestyle and/or medication. Additionally, every G.P. can indicate their preferences for this care, i.e. what they do and do not expect from the practice nurse.

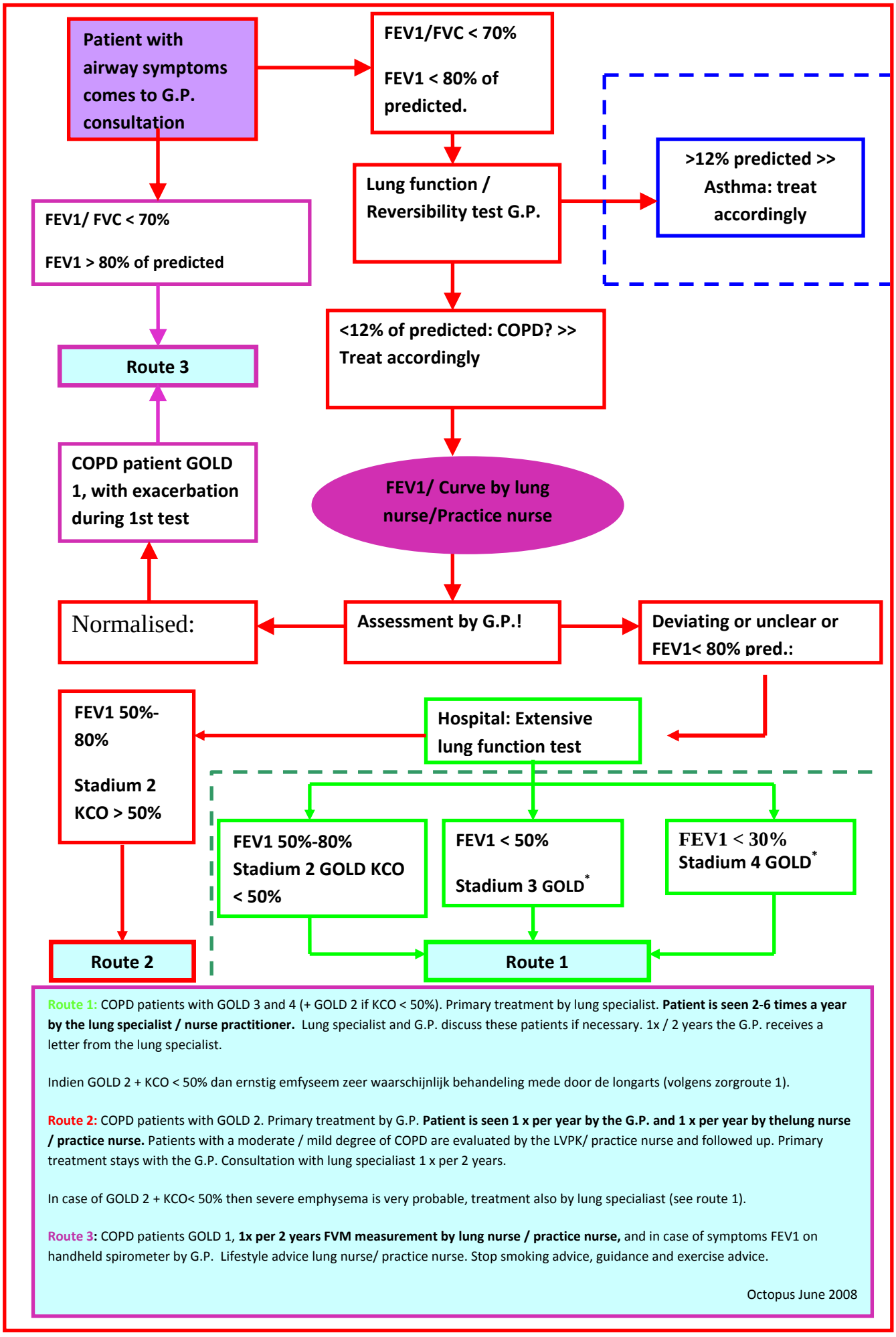
The final responsibility stays with the G.P. (due to WGBO – Law on medical policy agreement), who therefore has to keep control of the way the practice nurses executes the delegated tasks. This control can also be seen as guidance of the practice nurse.

Protocols on the content of the care as well as the execution and maintenance of apparatus is available at Cello and (to a large extent) on the Cello website.

Finally, please find below schemes of the 'Cello route', and a flowchart from the protocol of primary-secondary health care cooperation of the Diaconessen Hospital, Leiden. The difference is that a reversibility of 12% of the predicted value is taken, in contrast to the NHG Standard which takes 12% of the outcome value.

The Cello route for lung patients





Route 1: COPD patients with GOLD 3 and 4 (+ GOLD 2 if KCO < 50%). Primary treatment by lung specialist. **Patient is seen 2-6 times a year by the lung specialist / nurse practitioner.** Lung specialist and G.P. discuss these patients if necessary. 1x / 2 years the G.P. receives a letter from the lung specialist.

Indien GOLD 2 + KCO < 50% dan ernstig emfyseem zeer waarschijnlijk behandeling mede door de longarts (volgens zorgroute 1).

Route 2: COPD patients with GOLD 2. Primary treatment by G.P. **Patient is seen 1 x per year by the G.P. and 1 x per year by thelung nurse / practice nurse.** Patients with a moderate / mild degree of COPD are evaluated by the LVPK/ practice nurse and followed up. Primary treatment stays with the G.P. Consultation with lung specialiast 1 x per 2 years.

In case of GOLD 2 + KCO< 50% then severe emphysema is very probable, treatment also by lung specialiast (see route 1).

Route 3: COPD patients GOLD 1, **1x per 2 years FVM measurement by lung nurse / practice nurse,** and in case of symptoms FEV1 on handheld spirometer by G.P. Lifestyle advice lung nurse/ practice nurse. Stop smoking advice, guidance and exercise advice.

Octopus June 2008