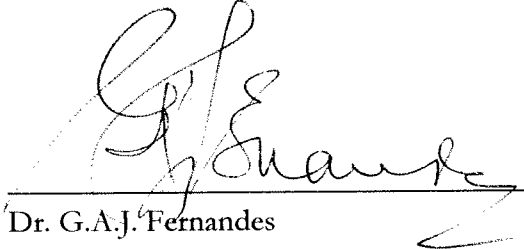


COMPETENCY HEARING COMMITTEE REPORT FOR DR. L. TSATSI


The only information provided to the hearing was the competency committee report in which the committee concluded that it was their opinion that "Dr. Tsatsi lacks adequate skill and knowledge to practice Diagnostic Radiology in Saskatchewan".

The Committee accepts the report of the committee and concludes, as required by section 45(8) of *The Medical Profession Act, 1981*, that Dr. Tsatsi does not have adequate skill and knowledge in the practice of medicine.

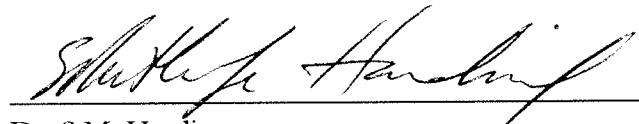
Signed this 6 day of November 2009 in the city of Saskatoon, SK.



Dr. G.A.J. Fernandes



Dr. A.D. Danilkewich



Dr. S.M. Harding

Competency Assessment Committee Report for Dr. L.D.R. Tsatsi

Committee Members:

Dr. Brent Burbridge, Chair
Dr. Stefan Kriegler
Dr. Tiffany Buglass

April 24, 2009

Methodology:

We set out to assess Dr. Tsatsi with the understanding that he practices as a General Radiologist, in a small urban centre, with the scope of his practice including: general radiography, fluoroscopy, computed tomography (CT), ultrasound (US), and mammography. We understand that the patient population bridges the spectrum from birth to geriatric.

To preface our report, we would like to stress the fact that the committee is attempting to provide Dr. Tsatsi with the fairest assessment of his abilities as possible. We approached this task without any bias, or conflict of interest.

Dr. Tsatsi is not a resident in training, he has however, challenged the Royal College Examination, twice now, and one would expect that he has spent considerable time preparing for this exam and has worked on honing his studying and exam preparation skills. We do not believe that we are attempting to hold Dr. Tsatsi to the “Royal College standard” of performance, as we are not the Royal College. We hope to determine whether Dr. Tsatsi is functioning at a level that is equivalent to his peers, in practice, in Saskatchewan.

The assessment consisted of **five** components.

The **first** component was an audit of images and reports from Dr. Tsatsi’s practice. These studies covered the major areas of practice of this physician. They included 20 CT examinations, 20 Mammograms, 20 Ultrasounds, 25 General radiographic studies (most of which are combined reports of several body parts), 10 GI/Fluoroscopy studies and 10 Interventional/Special procedures. The imaging examinations were selected by the Yorkton Medical Imaging Department General Manager, Maria McLaren, and audited the doctor’s practice after he had completed his final remediation session. A total of 105 examinations were audited.

The auditors reviewed the images and reports for the examinations submitted for review. Dr. Kriegler does not do mammography and thus did not engage in reviewing these examinations. The auditors were asked to affix a significance score to any missed

findings or misinterpretations detected. A score of 1 was considered to be an error that had diminished potential to cause patient harm while a score of 5 suggested that the patient may suffer significant short-term or long-term harm from the misinterpretation.

The **second** component was multiple choice questions to assess his overall fund of knowledge. This section was prepared by Dr. Kriegler. The questions were obtained from the recent American College of Radiology (ACR) in-training examinations. Dr. Kriegler selected questions that he felt were very pertinent to General Radiology practice and did not include those that were obtuse or focused on the esoteric. The time allotted for this exam was 3 hours, however the committee agreed to allow up to 4 hours to sit the exam if the candidate required more time. The answers were submitted on an answer sheet completed by the candidate. The exam was marked by the committee chair. Dr. Tsatsi was provided the multiple choice questions and answers, used in a previous assessment performed by Dr. D. Fladeland, in order to facilitate his preparation for this examination.

The **third** component was an OSCE type examination. Dr. Burbridge prepared this section. Questions used were taken from an existing bank of cases shared among the Program Directors of the Diagnostic Radiology training programs in Canada. All the cases were presented on a computer with questions answered on a provided answer sheet. Specific time limits were established for each section of the examination. Stations could not be repeated, nor answers changed, after the allotted time per section had expired. The stations included a variety of different questions (single best diagnosis, anatomy, differentials, management and description) and included different body systems/modalities (abdomen, gastrointestinal, chest, breast, genitourinary, msk, ultrasound). Cases outside of the scope of practice were not included. This section of the assessment was marked by the committee chair.

The **fourth** component was an oral examination. Cases were selected by the committee members covering the areas of chest, neuroimaging, abdominal, msk and breast imaging. Each of the committee members were assigned a major section of the exam to prepare a 1 hour oral examination. Dr. Burbridge prepared the MSK/Neuroimaging section; Dr. Buglass prepared the Chest/Mammography section; and Dr. Kriegler prepared the Abdomen./Pelvis section. An agreed upon method of scoring was selected by the committee. The oral examination took 3 hours to administer. Dr. Burbridge observed Dr. Buglass' session, Dr. Kriegler observed Dr. Burbridge's session and Dr. Buglass observed Dr. Kriegler's session.

The **fifth** component consisted of a site visit by Drs. Burbridge and Kriegler. The purpose of this visit was to be two-fold:

- a) To observe Dr. Tsatsi for a day in his role as a General Radiologist. We will be assessing how he manages his daily work flow and how his current practice is structured in regards to his ability to function in a clinical environment.

- b) To have personal interviews with some of the key clinical team members in Yorkton.

In attempting to develop standards against which to compare Dr. Tsatsi's performance, it became apparent that there were no validated metrics that we could fall back upon.

We decided to develop the following comparators for assessing performance on the OSCE, the Multiple Choice and the Oral Examination. Firstly, we gathered a pool of practicing Radiologists who agreed to sit the OSCE and the Multiple Choice examinations. This group consisted of 2 university based radiologists and 2 community based radiologists, neither of the community based volunteers practice in a hospital setting and do not currently interpret CT as a part of their practice. One of our volunteers was not FRCPC certified while the other 3 were FRCPC certified more than 10, but less than 20, years ago. Their scores on the OSCE and the Multiple Choice will be tallied and analysed to be used as a standard for performance in these areas.

Dr. Burbridge, and Dr. Kriegler, administered their components of the Oral Examination to three PGY5 residents in the Diagnostic Radiology Program, none of whom have challenged the Royal College Examinations as of yet. We used the same scoring criteria for the oral on all four occasions. These results were used as a comparison against Dr. Tsatsi's results.

In addition, we feel that we each offer our own unique perspective to this process. We have many years of experience in practice and we also have seen residents in training for a great number of years. One of our members has practiced in a small urban centre, under circumstances similar to Dr. Tsatsi, and is in an excellent position to determine how well he has adapted to his role in Yorkton.

Results

Part 1, Imaging Audit

Dr. Burbridge's Imaging Audit Report

	Patient Name	Patient ID#	Radiologist's Comments	Significance Score 1 = low, 5 = high
	CT (20 cases audited)			
1		2008-12700	CT Head/C spine 1) The report states no fractures! There is a fracture of the right occipital bone that extends to the foramen magnum. 2) The report states no subarachnoid hemorrhage! There is subarachnoid hemorrhage in the left temporal area. 3) The report states no subdural! There is a possible high left parietal subdural.	1) score 4 2) score 4 3) score 5
2		2008-14339	CT Head/Chest/Abdomen/Pelvis 1) Examination should have been limited to attempt to reduce radiation dose in a child. 2) CT head in a trauma situation should be a non-contrast examination. 3) Should instruct the technologists to perform the examination on a better field of view.	1) score 1 2) score 3 3) score 1
3		2008-14580	CT Chest 1) Why done without iv contrast? 2) Report states there are no	1) score 3 2) score 4 3) score 4 4) score 2

			<p>pleural effusions. There are large, bilateral, pleural effusions present. 3) I am very worried there is a right hilar mass. Bronchi are encased. This is not stated in the report. The examination requires iv contrast. 4) Adrenal glands not scanned. Why?</p>	
4		2008-14296	<p>CT Facial bones 1) Report states – “The rest of the facial bones are intact.” They are not, the bone of the floor of the right orbit is missing. Why? In addition: a) multiple right maxillary fractures; b) right ethmoid deformity; c) right globe sunken into orbit and sinus; d) soft tissues surrounding right orbit swollen. ? infection, ? trauma.</p>	<p>1) a) score 3 b) score 3 c) score 3 d) score 4</p>
5		2008-14250	<p>CT T-spine 1) There is not complete destruction of the t11 – t12 disc space as stated in the report. The disc space is mildly narrowed. 2) End-plates are sclerotic, vertebra is generally sclerotic. 3) There is a disc bulge/soft tissue prominence at this level that narrows the spinal canal to 0.06 cm. The conclusion should have suggested atypical infection i.e. TB or fungus and spinal canal stenosis.</p>	<p>1) score 4 2) score 4 3) score 5</p>
6		2008-14049	<p>CT Abdomen C-/C+ 1) Multiple lung nodules</p>	<p>1) score 4-5 2) score 3</p>

			<p>missed - ? metastases</p> <p>2) Pancreatic tail initially showed decreased attenuation but his resolves to normal on delayed scans. Not definitive of a tumor, but should have suggested MR or US.</p> <p>3) Bladder base irregular/lobulated. ? tumor bladder, renal TCC to bladder, or prostate. Cystoscopy should be suggested.</p> <p>4) No bone metastases should be stated.</p> <p>5) Spine and hip degenerative changes should be commented upon.</p>	<p>3) score 4</p> <p>4) score 2</p> <p>5) score 2</p>
7		2008-13339	<p>CT Chest/Abdomen/Pelvis</p> <p>1) There are at least 4 subcutaneous, soft tissue nodules in the thorax that were not noted.</p> <p>At least one of these has increased in size from 24/01/2008.</p> <p>These should be commented upon and suggest metastatic disease.</p> <p>2) There are 2 lung nodules, 1 in each lower lobe, unchanged. No comment in report.</p>	<p>1) score 4</p> <p>2) score 2</p>
8		2008-5494	<p>CT PE</p> <p>1) History states sob</p> <p>The CT demonstrates a 10 x 6.5 cm thyroid based mass. This was not commented upon.</p> <p>2) Should state trachea is deviated by the mass but not narrowed.</p> <p>3) Should probably suggest thyroid biopsy.</p> <p>4) Should comment upon the lack of adenopathy in the setting of the large mass.</p>	<p>1) score 2</p> <p>2) score 2</p> <p>3) score 2</p> <p>4) score 2</p>

9		2008-9779	CT Head C-/C+ 1) Bone hypertrophy is seen in the right posterior, lateral orbital wall and in the right sphenoid. This was not commented upon. ? Meningioma 2) Enhancing mass at the end of a surgical clip! Not commented upon. ? Tumor ? Meningioma ? Aneurysm	1) score 3 2) score 4
10		2008-12046	CT Abdomen Calculi Screening 1) A small calcify focus is seen in the left upper kidney that was not mentioned in the report. ? medulla, ? collecting system, ? parenchymal	1) score 2
11		2008-16021	CT Abdomen Calculi Screening 1) There are calculi in both kidneys. Only those on the right were mentioned in the report. 2) Right sided hydronephrosis is not commented upon in the report. 3) Stone size and location?	1) score 2 2) score 4 3) score 3
	Mammography (20 cases audited)			
1		2008-09413	1) Report states suspected cyst on left. Should have suggested an ultrasound for confirmation.	1) score 3
2		2008-10707	1) Possible spiculated lesion at 5 o'clock in the left breast. Should have done coned compression views and ultrasound or suggested them.	1) score 5
3		2008-11910	1) Left breast nodule should have been evaluated with ultrasound.	1) score 3

	General Radiology (25 cases audited)			
1		2008-15790	<p>CXR</p> <p>1) Dense opacity seen overlying the cardiac silhouette on both views, left sided, progressing in comparison to old films from 2005. Not commented upon.</p> <p>2) Did not comment upon possible mitral valve calcification.</p> <p>3) Did not suggest cardiac echo.</p>	<p>1) score 3</p> <p>2) score 1</p> <p>3) score 1</p>
2		2008-98555	<p>CXR</p> <p>1) Did not comment upon the increased heart size at 16/31.5 cm.</p> <p>2) Perihilar haze ? edema or interstitial lung disease. Not commented upon.</p> <p>3) Should suggest acquisition of old CXR re cardiomegaly/interstitial disease, or CT for correlation or diagnosis or the apparent interstitial process if old x-rays not available.</p>	<p>1) score 2</p> <p>2) score 3</p> <p>3) score 3</p>
3		2008-16326	<p>C-spine</p> <p>1) Comment should have been made about probable carotid artery calcification, right moderate and left mild.</p>	<p>1) score 1</p>
4		2008-05600	<p>Sinus x-rays</p> <p>1) The x-rays are normal, why was CT of the sinuses suggested?</p>	<p>1) score 2</p>
5		2008-12711	<p>Spine and pelvis</p> <p>1) There are multiple compression fractures of the spine. It is not possible to date them. Clinical correlation should have been sought.</p> <p>2) I am worried about an</p>	<p>1) score 1</p> <p>2) score 3</p>

			intertrochanteric fracture on the right. Clinical correlation and extra views should have been suggested.	
6		2008-05918	Spine and pelvis 1) Alignment of the spine is not normal as stated in the report. There is ventral slip of L3 on L4 of 0.5 cm. 2) The report states there is, “Mild interim development is seen at SI joints”. What does this mean? 3) The report states, “the rest of the disc spaces appeared normal.” This is not true, the L5/S1 disc space is completely ablated, degenerated, fused.	1) score 2 2) score 1 3) score 2
7		2008-16240	Ankle 1) The report states the ankle is normal. There is evidence of a probable healed tibial fracture and there is evidence of anterior tibio-talar degenerative joint change.	1) score 3
	Ultrasound (20 cases audited)			
1		2008-05417	Breast 1) The report states these are BIRADS category 3 images yet the images are normal. BiRads 3 is probable benign findings with short-term follow-up suggested. There are no abnormalities described to follow-up. These are normal images, BIRADS category 1.	1) score 3
2		2008-04947	Breast 1) The mass is increasing in size compared to previous. 2) The mass is significantly lobulated. 3) Must correlate with old	1) score 3 2) score 3 3) score 3 4) score 4

			images and mammography. 4) If these images demonstrate an increase in size as well, I would suggest a biopsy.	
	Interventional (10 cases audited)			
1		2008-04745	CT – Lung Biopsy 1) None of the images provided demonstrate a needle in the right lung nodule. There were 10 series of images. The images must document satisfactory needle placement.	1) score 3
2		2008-12909	PICC 1) No images provided to document PICC placement. 2) The PICC was left in the brachiocephalic vein. Why? Tip should be positioned in the SVC.	1) score 1 2) score 2
	Fluoroscopy (10 cases audited)			
1		2008-08211	Barium Enema 1) The report states that a stricture in the colon is probably related to diverticular disease. There are no diverticula of the colon seen. 2) In the absence of diverticula, this is a malignant, infectious, inflammatory, or ischemic stricture until proven otherwise. Malignancy must be excluded.	1) score 3 2) score 5

Dr. Kriegler's Imaging Audit Report

	Patient Name	Exam type	Radiologist	Significance
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			Comments	Score 1 = low, 5 = high
	CT (20 cases audited)			
1		Renal colic CT	Called Lt ureteric stone: ok	
			Called Rt renal stones: ok	
			Small calculus, maybe 2 in Lt Kidney not mentioned (n.m.)	2
2		CT Abd, pelvis	Adrenal hemorrhage: ok	
			Under call plum. changes. I would say consolidation or airspace, rather than "possible atelectasis"	2 or 3
			Small lung lucency n.m.: ? traumatic lung cyst	4
3		CT renal colic	Calculus reported: ok	
			2 small stones Lt kidney n.m.	2
4		CT head, c-spine, chest, abd, pelvis	12 rib # n.m.	2
5		CT foot	Lesion slightly obscured by artifact from skin marker	2
6		CT PE study	Mentions possible tracheal CA in text, but not in opinion; offers no suggestion for management	2
7		CT chest, abd, pelvis	Missed small lung nodules	3/4
			N.m. soft tissue masses in subcut fat on back	3/4
8		CT abd	Panc tu; Vasc. invasion n.m.	4
			Provides unlikely benign entities in DDx	2
9		CT abd	No clinical Hx: Report suggests probably no	4/5

			known malignancy. OPINION allows no room for doubt re. diagnosis of malignancy in this 25 y.o. woman. These may well be FNH's	
			4 phases done unnecessarily. But many rads at our institution would do the same.	2
10		CT T-/L-spine	Limited description of discitis-osteomyelitis; calls it only "discitis"	3
11		HRCT lungs	N.m. bilat. Pl effusions	3
			N.m. V large pulm. Artery (> 4cm)	3
			N.m. LL airspace opac	2
			N.m. low density focus Rt liver	1
			Maybe should mention other entities in DDx, e.g., organising pneumonia	2
12		CT chest, abd, pelvis	Shock bowel overcall	1/2
			Head done post-contrast only. Maybe it was an afterthought after CAP+, but really a trauma head must be non-contrast, or not at all	4/5
13		Ct head, c-spine	Intracranial hemorrhage mentioned but poor description. N.m. SAH Lt temporal and interrpedunc. cistern. N.m. parafalcine bld	4
			N.m. occipital #	4
			C-spine ok	
14		Abd CT	SBO reasonable description	
			N.m. intussusception	2

			RLQ. Probably not the cause of SBO	
15		CT head	N.m. large extraaxial mass Rt middle fossa, centered on sphenoid bone. Says “no recurrence”	5
			Features of chronic postsurgical change and ischemic encephalomalacia are incorrectly described as “edema” and (presumably) acute “Rt hemispheric infarct”	3
	General Radiology (25 cases audited)			
1		CXR	Mitral annular calc. n.m.	2
			Large lung volumes n.m.	3
2		Sinuses	I think “nasal polyposis” is an overcall	2/3
3		CXR	Heart size is at least borderline n.m.	2/3
			Large lung volumes	3
4		CXR, ribs, T-/L-spine	Lower lumbar disc space narrowing n.m. Says disc heights are N	2/3
			DISH n.m.	
5		CXR port	RT “midzone” airspace: ok	
			Under calls bilat. basal atelectasis and hypo inflation	2/3
			Concludes pneumonia: may well be correct, but persistent changes for 2 months should raise the possibility of something underlying, I think. I would have suggested CT	3/4
6		Lt hip, SIJ's, L-spine	Disc space narrowing L3-4, L4-5 n.m.	2/3

			TL clips n.m.	1/2
7		Sinus XR	Overcall septal deviation	1/2
			Suggests CT; not a radiologist's call	3/4
8		L-spine, pelvis, Lt hip	L5-S1 fused or nearly fused n.m.	3
9		ST lat neck	Maybe overcall of "severe narrowing of airway"; The adenoids are big, but not remarkably so for age.	2/3
10		CXR peds	LRTI findings, especially hyperinflation, not called	2/3
11		Ankle	Ant. impingement findings n.m., but on previous did say mild OA changes to talus	2/3
	Ultrasound (20 cases audited)			
1		Lt shoulder	Images do not show "discontinuity" of SP tendon, as stated in report. I would have said tendinosis.	3/4
2		Thyroid	MNG. Mentions dominant nodules but does not compare with previous.	2/3
			Lt lobe nodule measurements are confused with lobe measurements	2
3		Abd	Cholecystitis called; may well be correct, but GB not really distended. This should have been mentioned	2
4		Abd	GB called N; possibly correct, but it is thick-walled. The measurement of 2 mm given is at its thinnest	2/3

			point. Echogenic bile n.m.	
5		Pelvis	Diagnosis of ectopic made; Should have placed more emphasis on large likely hemoperitoneum	2/3
6		Axilla	Calls echogenic focus (?LN) a lipoma. Maybe correct, but I don't think one can be sure it is a benign lesion. Maybe Dr Tsatsi knew the result of a previous biopsy. Also, apparently no comparison made with previous. It is stable.	3
7		Neck	Biopsy recommended for possible hematologic malignancy; LN's bulky but not enlarged. Rt and Lt jugulodigastric nodes 1.1 and 0.8 cm SAD respectively.	5
8		Breast	Benign lesions called on basis of 2.5 years' stability. Previous not provided.	
9		Breast	Descriptive report only; no comment given. Prelim to Bx	
	Interventional (10 cases audited)			
1		PEG tube check	I'm not 100 % convinced that proper position in the stomach has been recorded. No contrast leak: ok	
2		Lung Bx CT	Not robust technique. Inaccurate localization; second puncture needed. Not convinced	4

			lesion was ever hit – not properly documented.	
			Direction of approach not optimal – risk of PT.	4/5
			Only 2 hrs observation	4/5
3		Thyroid Bx US	ok. Not sure I would have recommended Bx	
4		PICC US	2 US images, difficult to interpret	
	GI/Fluoroscopy (10 cases audited)			
1		UGI series	No DC fundal view	4/5
2		UGI series, limited peds	Possible duodenal folds thickened n.m	2
3		Gastrograffin enema	Malignant stricture sigmoid. Report says “no apple-core fissures” (features?), which is not correct. It is an apple-core lesion, with mucosal destruction. There are no features to suggest diverticular stricture. Malignancy is included in provided DDx.	4
4		DC Ba enema	Nice technique	
			Says Rt colonic diverticula, when the disease is predominantly left-sided. Although likely a typo, this is an important distinction.	2
5		VCUG	No explanation as to why exam was done under GA, resulting in a suboptimal study lacking voiding images. Previous (2007) did have voiding images. No reflux seen.	

6		UGI series peds	Not technically v. good exam. Too much BA obscuring D-J flexure	2
7		Ba enema	Nice N enema	
			N.m. lipid-based myelographic contrast residual	1

Dr. Buglass' Imaging Audit Report

	Patient Name	Patient ID#	Radiologist Comments	Significance Score 1 = low, 5 = high
	CT (20 cases audited)			
1		2008-12700	Missed L subarachnoid hemorrhage – large Fluid ethmoid and sphenoid sinuses. Can indicate a basal skull fracture. I had trouble loading on Stentor, and did not go back to review this case , as planned , when I got the discs.	4-5 2-4
2		2008-14339	Trauma head – contrast only. Must do trauma heads nonenhanced. He did not recommend a follow-up.	4-5
3		2008-14580	Missed hilar adenopathy Large left pleural effusion Inappropriate test, only HRCT, with other findings needs recommendation for complete CT chest	3-4
4		2008-14296	R orbit fracture Likely L orbit	3

			fracture	
5		2008-14049	Missed multiple lung nodules right and left, said lungs unremarkable ? Sclerotic lesion sacrum and L2 left transverse process, ? bone islands vs. meets Left renal lesion not mentioned, ? cyst Differential of pancreatic lesion, no mention of malignancy or need for other imaging	5 1 1 2 3
6		2008-13339	Subcutaneous nodules Breast nodule, ? lymphoma, ? breast carcinoma Needs Mammon	3 - 5
7		2008-9779	Mistakes atrophy for edema or infarct Missed intensely enhancing area right side adjacent to the surgical clip and orbital wall ? aneurysm ? fistula ? recurrent tumor Polyp maxillary sinus	3 – 5 5 1
8		2008-12046	? stone in left ureter vs. outside the bladder Didn't mention small renal calcifications	1 2
9			Probable motion C2, not fracture. I would have repeated scans in this area.	1
10			Ethmoid sinus	1

			thickening, mild	
11			Didn't mention bilateral collapse consolidation lungs. Right pleural effusion moderate, left mild. ?traumatic pancreatitis instead of adrenal hematoma	2 3 - 5
12			History of liver metastases. No mention of sclerotic bone lesion, likely bone island. I suspect he does not look at bone windows on a regular basis as many small abnormalities not mentioned on multiple CT. Probably not a big deal in this case, but can have serious repercussions if routinely not done.	1 3-5
	Mammography (20 cases audited)			
1			New calcifications right 12 o'clock – needs mages	3
2			3 cm palpable nodule, should suggest US	3
3			Normal not mastitis	2
	General Radiology (25 cases audited)			
1		2008-15790	No change left stated ? nodule in lingula, ? calcified, ? larger than 2005. Needs CT	5

2		2008-98555	Opacification of the lingula, ? slightly increased. Need previous/ follow-up.	2
3		2008-16240	? tiny avulsion near mortise acute plus old changes	2-3
4		2008-05600	The x-rays are normal, not sinus disease CT not required.	2
5			Nasal polyposis not present	2
6			R mild consolidation or peribronchial thickening Should suggest FU and compare with previous	1
7			Can't see upper t=spine on lateral, no comment Order asks for R ribs, dictates R ribs, actually L ribs images	2 2
8			Dilated bowel not mentioned	2
9			Some decrease in disc height	2
10			Skull hyperostosis, not a fracture	2
	Ultrasound (20 cases audited)			
1		2008-04947	? Mammo or just ultrasound. Need mammo to fully assess and determine need for biopsy.	3
2			Shoulder ? Calcification on plain films. Marked and measured an area, calling a tear, I would not call a tear	3

			based on these images. ? calcification, or tendinopathy	
3			OB – US contradict heart normal then not visualized. Not visualized is correct. Should repeat US later to confirm normal	3
4			Both demonstrated findings are lymph nodes, not lymphoma Unnecessary biopsy.	3
5			No inflammation in differential.	1
6			? recommend mammo be done on a 25 yo with palpable mass with normal ultrasound. If true mass present, needs mammo even with normal ultrasound	3
	Interventional (10 cases audited)			
1		2008-04745	CT lung biopsy. None of the images show needle in lesion.	3
2		2008-12909	?post insertion CXR done, need for placement, pneumo	2
	GI/Flouroscopy (10 cases audited)			
1		2008-08211	Stricture is present in the enema, need to ensure not malignant. Can't confirm diverticular on enema alone	5

Part 2, Multiple Choice Questions

Dr. Tsatsi's exam results are as follows:

MCQ - $117/180 = 65\%$

Volunteer scores:

Average percentage = 67%

Percentage range = 61 - 75%

Average score = 120

Score range = 110 - 135

Score median = 116

Part 3, OSCE Examination

Dr. Tsatsi's exam results are as follows:

OSCE - $198/242 = 82\%$

Volunteer scores:

Average percentage = 77.5%

Percentage range = 63 - 85%

Average score = 188

Score range = 153 – 206

Score median = 180

Part 4, Oral Examination

Three, separate, consecutive, 1 hour oral examinations were administered on March 19, 2009

Chest/Mammography Section – examiner Dr. Buglass, observer Dr. Burbridge

Musculoskeletal/Neurologic Section – examiner Dr. Burbridge, observer Dr. Buglass

Abdominal/Pelvis Section – examiner Dr. Kriegler, observer Dr. Buglass

The committee decided to use the scoring system detailed below. It attempts to provide some specific descriptors to the oral examination process.

80

- detects all findings in organized concise style;
- integrates very well, differential diagnosis limited to relevant conditions in appropriate order;
- management offered spontaneously, knowledgeable in radiologic and medical/surgical management;
- confident, clear, helpful consultant.

75

- detects all major findings and most secondary findings;
- integrates well, relevant differential diagnosis includes correct diagnosis, but order may be inappropriate;
- radiology management is well handled, may be less knowledgeable in medical/surgical management;
- useful consultant.

70

- detects all major findings without help, needs help to see secondary findings, may be a little disorganized;
- integration adequate, differential diagnosis includes correct diagnosis; order may be inappropriate, may include one or two inappropriate (but not foolish or dangerous) choices;
- management is adequate but must be drawn out of candidate;
- adequate as consultant, could be more clear and confident, may require prompting.

65

- needs help to detect some major findings;
- integrates poorly, rote differential diagnosis unrelated to findings;
- unaware of important management issues, recommends inappropriate studies;
- poor consultant, unclear, disorganized, uncertain.

60

- misses major finding even with help, discounts importance of major findings, persists with serious nonexistent findings, dangerous;
- no integration, omits critical diagnosis, differential diagnosis includes foolish or dangerous suggestions;
- dangerous management, suggests inappropriate invasive tests, refuses to consider tests critical to patient care; ,
- misleading or dangerous consultant, dogmatic when wrong

Summary of the Oral Examination Presented by Dr. Buglass, Chest/Mammography Section

This is a consensus report of Dr. Buglass and Dr. Burbridge.

This oral examination consisted of 5 cases present by Dr. Buglass, the examination was observed by Dr. Burbridge

1. Endobronchial lesion with progressive collapse.
Lots of leading, especially with the plain films. Never did see the RLL collapse. Overall, 60-65
2. Asbestosis case. He did pretty well, but had presumably never heard of round atelectasis. Overall, 75
3. Mammo with abnormal lymph node -- OK Overall 70-75
4. Mammo with persistent palpable mass and normal FNA. Overall good, 75
5. Mammo with nipple discharge and dilated duct-- poor mammo interpretation, missed dilated duct, made up the presence of a mass. Essentially went on clinical info. US and discussion better. Overall 65

For my section he would get a pass, not with flying colors.

Summary of Oral Examination presented to Dr. D. Tsatsi by Dr. B. Burbridge, Musculoskeletal/Neurologic Section

This is a consensus report of Dr. Burbridge and Dr. Kriegler.

This oral examination consisted of 5 cases prepared by Dr. Burbridge, the oral examination was observed by Dr. S. Kriegler. I created a point-based objective scoring sheet for my examination, in addition to the descriptive scoring strategy detailed above.

Summary of Cases:

Case 1

A supine x-ray of the abdomen of a 49 y.o female with abdominal and right groin pain. The initial images reveal a permeative destructive bone lesion of the anterior pelvis and right acetabulum. There is also a metallic biliary stent. Subsequently, a CT scan of the lower chest and abdomen reveals a breast prosthesis on the left and findings of extensive metastatic disease. The overall objective mark obtained from my scoring sheet was 25/32 (78%). I scored this case as a 75.

Interestingly, Dr. Tsatsi stated that he could not visualize air-fluid levels on the plain x-ray of the abdomen that was clearly marked as being taken in a supine position. Air-fluid levels cannot physically be visualized on a supine image. Presumably, he did not see the supine marker on the film.

Case 2

The second case consisted of ultrasound and CT images of a child with hydranencephaly. I scored this case as 25/27 (93%). I also awarded a mark of 75 on the descriptive scale.

Case 3

This patient demonstrated CT and angiographic findings of subarachnoid hemorrhage and multiple intracranial berry aneurysms. Dr. Tsatsi failed to detect the multiple aneurysms initially and it took considerable direction from me to facilitate him detecting the additional aneurysm present. His understanding of diseases associated with intracranial aneurysms is completely lacking. However, he detected the subarachnoid hemorrhage on the CT and made appropriate imaging analysis and recommendations for the most part. The objective mark for this case was 19/37 (51%). The descriptive score awarded was 65

Case 4

This case demonstrated a lytic expansile posterior vertebral tumor in a child. I found the descriptive terms that Dr. Tsatsi used for the plain x-ray portion of this case quite confusing. He persisted in stating that the images demonstrated “hypertrophy” of the bone rather than the displayed findings of expansion and lucency. Having said this, he did provide a reasonable differential diagnosis of the abnormality. This is somewhat confounding. The objective mark for this case was 18/23 (78%). The descriptive mark awarded was 67.5.

Case 5

The final series of images tested observational and descriptive skills for a variety of plain x-ray and CT images of cervical spine trauma. Dr. Tsatsi’s performance in the section was good. He made all of the necessary observations and differentiated all of the critical findings. The objective mark obtained was 18/23 (86%) The descriptive score awarded was 75

Discussion:

The total score on the objective scoring was 105/140 (75%).

The average score on the descriptive scale was 71.5.

Dr. Tsatsi performed at a passing level on the cases administered. In comparing his performance to our three PGY5 residents he did not do as well as any of them. The scores for the three residents in question were 84%, 90%, and 85%.

Summary of Oral Exam Presented by Dr. Kriegler, Abdominal/Pelvic Section

This reports includes separate comments by Dr. Kriegler and Dr. Buglass.

This oral examination consisted of 7 cases presented by Dr. Kriegler, the examination was observed by Dr. Buglass.

Dr. Buglass' Summary:**Case 1**

Dermoid and empty sac. Lots leading. Suggested dermoid may be ectopic. 65-70

Case 2

Terminal ileitis. Poor knowledge of Crohn's, needs lots of help. 65

Case 3

FNH Did quite well. 75-80

Case 4

Pancreas neck CA. Did fairly well 70-75

Case 5

Splenic pseudo aneurysm. Saw some major findings but totally off track on others. (i.e. free fluid, not see pseudo aneurysm. This could have been a potential harmful miss. I would give him a 65.

Case 6

Diverticulitis I think this is the one where he persisted a fair bit for appendicitis as first consideration in LLQ. Eventually got most of case 65-70

Case 7

Thumb printing probably a 65 to 70, needed help identifying the thumbprinting.

Overall, it would be a stretch to pass him on this section, although most of what he said wasn't outright dangerous, it was also not particularly helpful.

Dr. Kriegler's Summary:

Case 1

Dermoid and empty sac, Ultrasound images: Did need a fair bit of leading, especially with dermoid. Not organized in presentation. Although he did include the possibility of ectopic, he (appropriately) didn't place it high on his DDx. Otherwise, he identified and correctly interpreted the findings relating to the pregnancy, made an appropriate request for BhCG, and gave a reasonable impression of being able to manage the case in practice. My score **70**

Case 2

Terminal ileitis, CT images: Needed lots of help. Lots. Very disorganized. Takes a long time to even mention that there is a thick-walled loop of bowel. Then likes sigmoid colon and Meckel's before considering TI. Doesn't seem to have a good practical grasp of Crohn's disease, but when prompted is able to recite findings. My score **60**

Case 3

FNH, 4 phase CT images: Quite poor organization but was able to identify and interpret essential findings to come up with a DDx with FNH in its rightful place at the top. Then followed this up with a rote list of hypervascular lesions including inappropriate suggestions such as hemangioma and THAD. My score **75**

Case 4

Pancreas Neck CA: US and 2 phase CT images: Saw all the essential findings eventually, and gave a not bad DDx. Again not very organized. I don't think putting IPMT at the top was a great idea, but not crazy either. Was able to answer questions about resectability reasonably well. My score **70**

Case 5

Splenic pseudoaneurysm with active bleeding, CT images: Sees perisplenic hematoma (sentinel clot) but calls it "subcapsular". Then says no FF, and talks about "lenticular collection on the surface of liver". There is, in fact, a very large hemoperitoneum, which is visible around the liver. Takes a while to mention extravasated contrast. Doesn't see the splenic aneurysm or the contrast jet, which are visible on the 4th image. Again disorganized. Concludes with "extensive injury to spleen and liver", and suspicion for arterial bleed. No mention of treatment options or potential role for interventional radiology. My score **65**

Case 6

Diverticulitis, US and CT images: First words: "tubular, blind ending structure" Also says no FF and no FA. One can't say these things on selected US images. Really wants to make this appendicitis, even though it is LLQ and the US images look nothing like appy. Does better on CT, and makes some redeeming comments towards the end but really struggled to put this very straightforward case away. My score **65**

Case 7

Thumbprinting, 3 Plain film views: Called lots of questionable findings before spotting thumbprinting. Gave a reasonable DDX but needed prompting. Really struggled to come up with the idea to call the clinician. Even if one doesn't consider communication important in one's own realm, I think it is virtually impossible not to recognize that it is widely considered by one's peers to be a cornerstone of good practice. Should we put this oversight down to stress and exhaustion? My score **65**

Overall, I think Dr Tsatsi had more difficulty than expected with my cases. (I showed the same cases to one of our final year residents, and though I realize very well that the comparison is not fair, I couldn't help being struck by the contrast.) These are not difficult cases, but Dr Tsatsi's disordered approach made them look much tougher than they were. He also didn't do very well on the "eye test" cases. I wonder if maybe CT and especially ultrasound are more specific problem areas, but then there was also the not terribly subtle case of thumbprinting. How many things are there to look for on an abdo film? Certainly his exam technique is lacking in polish, but from what I have seen I think the problems may run deeper than that. It may be justified to question his depth of knowledge: even though in some areas it was surprisingly good (note the discussion about hypervascular liver lesions), there do appear to be important bare areas. And even in some areas, such as hypervascular liver lesions, and especially in the discussion about Crohn's disease, where he does display reasonable apparent depth of knowledge, the practical application of that knowledge is generally weak, and in places very poor.

I agree with Tiffany that no single outright dangerous mistake was made, but I wouldn't be brimming with confidence with Dr. Tsatsi reading my family member's abdominal imaging. I don't think I could find a way to pass Dr Tsatsi on this section.

Part 5, Site Visit

Dr. Kriegler and I visited Yorkton to observe Dr. Tsatsi on April 6, 2009. We were graciously received by Dr. Tsatsi and the other members of the department. We had onsite interviews with Ms. McLaren, Dr. Mahfud, Dr. Bishop and Dr. Eybers. We were in the hospital from 0900 to 1400 hours, with a 45 minute lunch break. We observed Dr. Tsatsi at work between 1000 and 1200 hours and from 1300 – 1415 hours.

Ms. M. McLaren, Manager Medical Imaging.

She reported that she was aware of our review but had no knowledge of the cause for concern and had not received any correspondence in regards to the outcome of any of the previous reviews of Dr. Tsatsi. She stated that she was not aware of any complaints against Dr. Tsatsi by patients or physicians. She stated that he was well liked by the staff and physicians of the region. She had no concerns about Dr. Tsatsi's performance as a General Radiologist. She told us that there was no formal morbidity and mortality rounds or case review rounds in Medical Imaging and that there was not currently a Head of the Department to oversee these types of academic and quality assurance activities.

Dr. M. Bishop, Vice President of Medical Services

He welcomed us and thanked us for reviewing Dr. Tsatsi. He expressed concerns about the number of reviews that Dr. Tsatsi had undergone and that the process seemed to be taking quite some time to complete. He told us that Dr. Tsatsi had taken leave to receive additional training in the past and he hoped that we would find that he had made some improvement after his remediation. He was not aware of any patient or physician complaints against Dr. Tsatsi. He stated that the Health Region had a Critical Incident Reporting Strategy and that Dr. Tsatsi had not been involved in one of these types of reviews.

Dr. A. Mahfud, Radiologist

He reported that Dr. Tsatsi's reports were quite disorganized and did not meet the standard of what the "Royal College" would accept when he first moved to Yorkton in 2006 to join Dr. Tsatsi and Dr. Hahn (Radiologist). He told us that he had worked with Dr. Tsatsi to help him improve this and that his reports were much better in the recent past. He also stated that he and Dr. Tsatsi discussed difficult cases together and that if he found something that Dr. Tsatsi had missed or misdiagnosed he would share this with him. He stated that he did not feel that this occurred very often and that the frequency of these misses was decreasing.

Dr. V. Eybers, Chief of Surgery

He felt that Dr. Tsatsi was a practical, helpful, accommodating radiologist who provided the information that he needed to treat his patients appropriately. He found his reports succinct and "dogmatic". He felt that Dr. Tsatsi was one of the more pleasant Radiologists in the department. He was not aware of any complaints against Dr. Tsatsi.

Dr. J. Hahn, Radiologist

Dr. Hahn responded by email and his comments were taken into consideration.

Dr. Burbridge's Site Visit Report

We observed Dr. Tsatsi report plain x-rays, ultrasound, CT, and mammography examinations. Dr. Tsatsi is a diligent, dedicated, responsible Radiologist who applies himself fully to each examination presented to him. He is a calm, quiet, pleasant individual who seems to be well liked by the staff and clinicians. He manages his dictation in an efficient manner and signs his reports, after thoroughly reading them, in a timely manner. He is adept at using the CT workstation and uses the many features of the workstation, including using multiple windows and levels, zooming and panning, and creating multiplanar reformats of the imaging data. He has access to the internet and a variety of textbooks and used reliable internet resources to facilitate his work while we were observing him.

In regards to breast imaging, we learned that the radiologists in the department do not double-read the breast imaging examinations performed. In addition, computer-assisted mammography assessment was available on the workstation used for mammography but, Dr. Tsatsi stated that he did not use it very often as it interrupted the technologists work flow and he did not feel that it worked very well as a clinical tool.

During the observation period Dr. Tsatsi reported 26 imaging examinations.

We noted the following issues related to this period of observation:

- 1) He failed to comment upon apparent lysis of the tip of a previously partially amputated distal phalanx. This finding may have been suggestive of osteomyelitis, but was not reported.
- 2) He reported bibasilar consolidation and bronchial wall thickening on a pediatric chest x-ray that we both felt was normal.
- 3) He reported a sentinel loop of dilated bowel, but failed to provide a differential diagnosis beyond incomplete small bowel obstruction. He recommended only follow-up abdomen films rather than clinical correlation and other examinations to help clarify the proposed small bowel obstruction.
- 4) He spent a great deal of time analysing a lumbar spine series and dictated them as normal when he suddenly realized that there was a grade II spondylolisthesis at L5/S1. He deleted his initial dictation and then described the findings present. This was an obviously chronic condition most likely related to bilateral spondylolysis. He then proceeded to call the most responsible physician and inform him that his patient had an acute L5/S1 fracture with one vertebral body jumped ahead on the other related to his hockey injury. This displayed a somewhat shocking lack of knowledge of the pathophysiology of the chronic spondylolisthesis and set-off an unfortunate chain of events for the referring physician and patient.

- 5) He noted that the most recent chest x-ray he was reviewing demonstrated a cardiac size at the upper limits of normal. He did not measure the cardio-thoracic ratio with a ruler on the new or old film.
The images demonstrated obvious cardiomegaly and right ventricular enlargement. More importantly, he failed to diagnose the severe pulmonary artery enlargement visible on the radiographs.
- 6) On a lumbar spine series, Dr. Tsatsi did not comment on the fact that the patient had six lumbar type vertebral bodies.
- 7) On a mammographic series Dr. Tsatsi did not note an ill-defined opacity in the right breast that I would have requested coned compression images on and possibly an ultrasound. He used the Computer Assisted Diagnosis software package on the mammography digital viewing station and the software detected the opacity, but yet he failed to act upon the finding. He sent the patient for left breast ultrasound to investigate a mammographically occult, clinically suspected, nodule.
- 8) X-rays of both hands and wrists were presented. There were bilateral abnormalities. He stated the heading of Bilateral Wrists, then he went on to describe the radiographic findings on the left side. He never did describe the findings on the right side and ended the report.
- 9) A chest CT detected 2 unsuspected 2 – 3 mm nodules in a patient who was a smoker. Dr. Tsatsi stated they were in the lower lobe when they were in the upper lobe. He felt that the nodules were granulomata while we both felt that the nodules probably deserved a follow-up CT, at an appropriate interval, to insure nodule stability and exclude the possibility of lung carcinoma.

Dr. Kriegler's Site Visit Report

Dr. Burbridge and I spent a half day at Yorkton Regional Health Centre. We conducted brief interviews with the Chief radiation technologist, Ms. McLaren, the Chief of Staff, Dr. Bishop, the head of surgery, Dr. Eybers and one of Dr. Tsatsi's radiologist colleagues, Dr. Mahfud. We observed Dr. Tsatsi for 2 hours during a clinical review session in his department, and briefly inspected the facilities at his disposal.

Ms. McLaren is unaware of any concerns in the local medical community regarding the standard of Dr. Tsatsi's work. He is well liked and respected in the Radiology department, and enjoys the support of the technologists. He displays a strong work ethic, his work is highly valued, and he provides a much needed service.

Ms. McLaren does report that the absence of a head of radiology presents administrative problems. from the department's perspective.

Dr. Bishop reports he is aware of “no quality control issues” with Dr. Tsatsi’s work, including no physician or patient complaints. Regarding Dr. Tsatsi’s “deportment as a physician, things seem fine”. Dr. Tsatsi enjoys the health region’s support, evidenced by the time he was given off to pursue his further training subsequent to the previous CPSS audit.

Dr. Bishop also comments on the difficulty of working with a Radiology department that has no designated head. He states there is no structure for review of morbidity and mortality in the Radiology department or health region. There is a critical incident reporting process, however.

Dr. Eybers has no complaints about Dr. Tsatsi. He reports Dr. Tsatsi to be approachable and available as a consultant, and finds his reporting and consulting style helpful from a surgeon’s perspective. He is not aware of any misdiagnoses or missed diagnoses by Dr. Tsatsi.

Dr. Mahfud says that when he first worked with Dr. Tsatsi in 2006, he had concerns about the quality of Dr. Tsatsi’s work. He states Dr. Tsatsi’s reports were “limited”, and not structured to the expected standard. He has seen a definite improvement since that time. He does come across “misses” by Dr. Tsatsi “once in a while”, and points them out to him, but does not say whether or not this is beyond the expected norm. Dr. Mahfud reports Dr. Tsatsi shows appropriate willingness to consult his colleagues.

Dr. Mahfud confirms there is no double-reading of mammography in their department, citing a lack of financial support from the health region.

Dr. Tsatsi works in a well equipped, relatively modern Radiology department. The radiographic, ultrasound, CT, fluoroscopy and digital mammography units in the department are up to date. Internet access is readily available at various locations in the department.

The image viewing facilities are not arranged very well. Dr. Tsatsi uses a cramped office to view general radiographs on film. He then has to move about three meters to a digital mammo workstation (equipped with a CAD program) to view mammographic images. For reviewing previous mammograms, greater than about one year old, there is small viewing box, placed below eye level to a seated person. Ultrasound scans are viewed off hard copy. Some normal scans are apparently not shown to the radiologist while the patient is in the department. To view CT images, including during supervision of scans, Dr. Tsatsi has to leave his office and move to a very cramped cubicle where there is a reasonably functional Philips CT viewing workstation.

Reports are dictated onto a cordless digital Dictaphone that can be docked at several locations in the department for transfer of voice files to transcription. Transcription turnaround time varies from minutes to about two days. There is a system for prioritization of reports, which Dr. Tsatsi does use. Transcribed paper reports are brought to Dr. Tsatsi for signing, regularly and in small batches, and he attends to them promptly.

Dr. Tsatsi and his fellow radiologists work in a busy department, are responsible for a wide range of duties simultaneously, and subject to frequent interruptions. There are usually two radiologists in the department during office hours, one of whom is assigned to “procedures”, including fluoroscopy and interventional procedures, as well as CT, and the other to “reporting”, including general radiology, mammography and ultrasound. There does appear to be some overlap and flexibility in division of the work.

Radiologists are remunerated as individuals on a fee-for-service basis.

During the plain film review that we attended, Dr. Tsatsi saw approximately twenty five examinations. He displayed a calm and methodical manner at the view box. I was, however, struck by several concerning points in his dictations. In general, descriptions of abnormalities were vague and loose. There were frequent inconsistencies between text and conclusions. Several recommendations were made that were not supported by the findings in the text. I also disagreed significantly with Dr. Tsatsi’s observations, and with his interpretation of findings, on several occasions.

A few examples are described:

- Normal pediatric AP CXR. Technique incorrectly described as “PA”. Findings of “bilateral consolidation” and “Perihilar cuffing” reported.
- Appropriately interprets a somewhat abnormal abdominal series as consistent with ileus or low-grade small bowel obstruction, but then says “follow-films. recommended”, which is a potentially very misleading suggestion.
- A clearly chronic, typical L5-S1 spondylolysis spondylolisthesis with sacral buttressing, is at first not seen (“alignment intact”) on a lumbar spine series, performed following a hockey injury. Then, after spotting the finding, great effort is made to track down the referring family practitioner and inform him, incorrectly, that this is a serious acute injury. The examination had been performed 5 days previously.
- CXR showing cardiomegaly with marked right ventricular enlargement and marked pulmonary arterial enlargement. The dictation makes no mention of pulmonary arteries, and in the text the heart is describes as “upper limit of normal”, though the conclusion states cardiomegaly.
- Bilateral wrist radiographs, with bilateral abnormalities: Only the left wrist is mentioned in the report.

I had limited opportunity to observe Dr. Tsatsi in reviewing CT, and he reviewed only one unremarkable ultrasound examination during our visit. There were no procedures during the visit. Dr. Tsatsi did demonstrate proficiency at operating the CT viewer, and made appropriate use of different window settings and image sets. He also showed an appropriate level of familiarity with the internet, given the limited observation time.

Textbooks in the department are adequate. In the interactions that I was able to observe between Dr. Tsatsi and the staff in his department, his manner was pleasant and respectful.

In conclusion, Dr. Tsatsi has clearly earned the respect of his fellow workers in his community, with the dedicated service that he has been providing, and (to those that are aware) with the earnest efforts that he has made to overcome the deficiencies that have previously been identified. His working environment is supportive and technologically adequate, but not ideal in many respects, particularly with regard to ergonomics. I believe integration into the provincial PACS will greatly improve this aspect. Unfortunately, I have persistent concerns regarding the standard of Dr. Tsatsi's clinical work, that have again repeatedly been brought to the fore, even in a small sample of cases.

Conclusion

This was a very difficult and time consuming process for the committee as we attempted to provide Dr. Tsatsi with what we feel was a fair, broad-reaching, and comprehensive review of his abilities. We most ardently hoped that the process that we established would demonstrate that Dr. Tsatsi had benefited from his remedial educational experiences and was competent to practice Radiology.

The committee found the audit of randomly selected imaging examinations, the oral examination sessions, and the site visit, to be of significant concern.

The audit of imaging examinations selected, at random, by Ms. M. McLaren revealed a substantial number of reported concerns from the committee members. This was particularly evident for the CT cases reviewed. Dr. Burbridge commented upon 11/20 (55%) CT examinations, Dr. Kriegler had concerns about 15/20 (75%) of the CT cases, while Dr. Buglass relayed concerns for 12/20 (60%) of the CT cases presented for review. Many of the misdiagnoses detected may lead to significant patient morbidity, for example, a CT head examination where Dr. Tsatsi failed to detect a basal skull fracture, subarachnoid hemorrhage, and a possible subtle parietal subdural hematoma! There were also missed diagnoses that failed to detect possible primary and secondary malignancies and recurrent malignancy.

The total number of imaging audit concerns for Dr. Burbridge was 26/105 (25%). The imaging audit concerns for Dr. Kriegler were 44/85 (52%). The denominator for Dr. Kriegler's assessment is 85 as he does not interpret mammographic examinations. The imaging audit concerns for Dr. Buglass totalled 32/105 (30%).

During the oral examination sessions we found that Dr. Tsatsi seemed to create an impression of the case presented to him in a very expedient manner. He then presented a variable description of the finding(s) that he believed were important. At times, the descriptors used were concise and appropriate, at times they were not. The examples of the absent air-fluid level on a supine film and the persistent description of a lytic, expansile bone lesion as "hypertrophic" are provided to support his inappropriate

descriptors. This is problematic as differential diagnosis in imaging is dependent upon the descriptors used to characterize imaging findings i.e. lytic vs. sclerotic, expansile vs. non-expansile.

In addition, the differential diagnoses provided by Dr. Tsatsi were quite narrow and often do not include pertinent conditions. His depth of knowledge surrounding some of the cases presented was quite shallow.

Also, his handling of the oral examination cases lacked order and solid methodology. He was very inconsistent in presenting major and minor findings, he presented very brief and narrow differential diagnoses and he did not willingly suggest further management strategies in a consistent manner.

Dr. Tsatsi's passed Dr. Buglass' oral examination, while his performance on Dr. Burbridge's oral examination was just barely above the passing mark of 70. Both Dr. Buglass and Dr. Kriegler felt that Dr. Tsatsi failed the Abdomen/Pelvis oral exam.

The site visit observation session revealed 9/26 (35%) cases that caused us concern. At least five of these misinterpreted studies (cases 1, 4, 5, 7, and 9) may have grave consequences for the patients examined. This was extremely distressing. If anything, Dr Tsatsi's pace of assessing imaging examinations is quite slow and we did not feel that errors detected were related to working too quickly or rushing through cases in an haphazard manner.

Dr. Tsatsi is a well-meaning, well-liked, diligent and hard-working radiologist. He was gracious and accommodating. These qualities are admirable, and commendable, given the challenging situation he has been attempting to remedy since his first ACMI Practice Audit.

However, his efforts have not been successful in raising his level of performance to the satisfaction of the committee. There would seem to be a perceptual-cognitive disconnect in his management of oral examination cases and also in his daily imaging assessments. The rates of misinterpretation of imaging examinations is frankly very distressing, especially for CT exams, but there is no imaging modality that is exempt from misinterpretation based upon our review. This most certainly raises the spectre of the possibility for patient morbidity, and/or mortality, related to these misdiagnoses. A great number of interpretation errors were scored as 3 or greater in potential severity by committee members, suggesting that there may be real potential for patient harm or poor patient prognosis.

It is frankly very surprising to the committee members that there have not been formal complaints, or letters of concern, about Dr. Tsatsi received by the Medical Imaging department administration or the Vice-President - Medical of the health region. However, this may be explained by the fact that there is no formal morbidity or mortality review process within the Imaging Department or within the health region.

It is the unanimous opinion of the committee Dr. Tsatsi lacks adequate skill and knowledge to practice Diagnostic Radiology in Saskatchewan.

We suggest that Dr. Tsatsi requires, at a minimum, one year of remedial training consisting of 3 months of CT, 3 months of Ultrasound and 6 months of General Radiology before he is allowed to practice Diagnostic Radiology unsupervised. This one year training period should be rigorously organized with recognized goals and objectives and should be diligently evaluated to ascertain that adequate performance has been achieved during each of the prescribed rotations. If performance is not satisfactory, the problematic rotation should be repeated.

Additionally, the members of the committee wish to express their elevated level of concern about the potential harm that may befall patients who have had their imaging assessed by Dr. Tsatsi and we would be remiss in not stating that we feel that his previous work may require reanalysis in some manner.

Respectfully submitted,

Brent Burbridge
Chair, Competency Committee

Dr. S. Kriegler

Dr. T. Buglass